

20011203.qrp v02_n393.qrl.20011203

Date: Mon, 3 Dec 2001 19:03:13 EST
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 2393

QRP-L Digest 2393

Topics covered in this issue include:

- 1) [113651] [Elmer 101] Getting ready (part 1)
by mikemo@attglobal.net
- 2) [113652] Re: Red Hot 20 problem
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- 3) [113653] More 160m?
by "ss lyon" <sslyon@megalink.net>
- 4) [113654] AL7FS - KL7Y (US and Europe) + QRP ARCI Holiday Spirits Homebrew Sprint
by Jim Larsen AL7FS <AL7FS@ARRL.NET>
- 5) [113655] Re: More 160m?
by "w8diz" <w8diz@fpqrp.com>
- 6) [113656] ARCI Holiday Spirits
by "Karl F. Larsen" <k5di@zianet.com>
- 7) [113657] [Elmer 101] Power supply (part 2)
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- 8) [113658] Back to the Frigid North, Middleton,WI
by "Trevor Jacobs" <fxtech@earthlink.net>
- 9) [113659] Eagle CAD software
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- 10) [113660] Re: AT in PA Sunday
by "Ron Polityka" <wb3aal@fast.net>
- 11) [113661] Re: [112682] Re: 13.5 MHz IF Anybody?
by Brian Kassel <bkassel@dancris.com>
- 12) [113662] Re: Should be simple ... 80M VFO saga continues
by Steven Weber <kd1jv@moose.ncia.net>
- 13) [113663] Holiday Spirits Homebrew Sprint, Soap
by "Rod N0RC" <rod@n0rc.com>
- 14) [113664] Re: Eagle CAD software
by David Hinerman <wd8civ@worldnet.att.net>
- 15) [113665] Cub Fox Hunt for Tuesday 12/4
by "Tony Parks" <robert.parks11@gte.net>
- 16) [113666] Re: Back to the Frigid North, Middleton,WI
by "Glenn Butzlaff" <gbutzlaff@wi.rr.com>
- 17) [113667] Re: 42 Volts and QRP?
by David Sarraf <david.sarraf@paonline.com>
- 18) [113668] FS: NorCal Rigs
by Cameron Bailey <kt3a@juno.com>

- 19) [113669] Re: More 160m?
by Fred Lesnick <flesnick@tbaytel.net>
- 20) [113670] Contest: ARCI HB Sprint K7RE Results
by Brian Kassel <bkassel@dancris.com>
- 21) [113671] FS: NorCal Rigs
by Cameron Bailey <kt3a@juno.com>
- 22) [113672] Re: use SPICE for rf probe analysis?
by Jeff Furman <jfurman@ocs.net>
- 23) [113673] Unsubscribe?
by raoul@olympus.net (J. Benedict)
- 24) [113674] ScQRPion Stinger Singer Upgrade
by "Bob Hightower" <nk7m@extremezone.com>
- 25) [113675] The Links
by "Rich Dailey, KA8OKH" <okh.npi@gte.net>
- 26) [113676] to unsubscribe
by <jfox6@houston.rr.com>
- 27) [113677] [Elmer 101] NPO
by "Steve Thompson" <steve@xcvr.com>
- 28) [113678] Re: [Elmer 101] NPO
by "N8IE" <n8ie@woh.rr.com>
- 29) [113679] Re: [Elmer 101] NPO
by "Rod N0RC" <rod@n0rc.com>
- 30) [113680] Re: [fpqrp] FOX: Truffle Hunt for 12/5 0130 UTC
by k8cz@att.net
- 31) [113681] A Bargain at Any Price
by Kenneth Hoglund <hoglund@wfu.edu>
- 32) [113682] Re: HB:TEST EQUIPMENT
by Stephen Trier <sct@kg8ih.cit.cwru.edu>
- 33) [113683] Dayton 2002 Rooms Pre-Announcement
by Hank Kohl K8DD <k8dd@arrl.net>
- 34) [113684] Re: That old B Battery
by Oscar A Hoyt <k5ubs@juno.com>
- 35) [113685] QRP Contact, NB6M-K5KW
by K5KW@aol.com
- 36) [113686] Re: Eagle CAD software
by "Brad Hernlem" <alihernlem@hotmail.com>
- 37) [113687] Surface Mount Crystals ???
by "Jean and Gary Hanson" <hansongr@uts.cc.utexas.edu>
- 38) [113688] Fall QRPp to the Printers Tomorrow!!
by "Doug Hendricks" <ki6ds@dospalos.org>
- 39) [113689] Re: [Elmer 101] NPO
by "Dennis Ponsness" <wb0wao@hotmail.com>
- 40) [113690] Further DX, and a very special thrill on 3.686
by NB6M@aol.com
- 41) [113691] [Elmer 101] component form factors
by Haines Brown <brownh@hartford-hwp.com>
- 42) [113692] HB: Fun Material
by Pete Burbank <plburbank@kih.net>

43) [113693] Michigan QRP Net Tuesday 9:00 PM Eastern Time on 3.535MHz
by "Kwik, Ed " <ed.kwik@delphiauto.com>

44) [113694] Re: AL7FS - KL7Y (US and Europe) + QRP ARCI Holiday Spirits Homebrew Sprint
by W2AGN <w2agn@pobox.com>

45) [113695] 13.5 MHz crystal filter
by "Leon Heller" <leon_heller@hotmail.com>

46) [113696] Re: [Elmer 101] NPO
by Mike Maiorana <mikemo@attglobal.net>

47) [113697] SS log submission troubles from N3FJP logger
by Jim Giammanco <giamman@rouge.phys.lsu.edu>

48) [113698] =?iso-8859-1?Q?Re:_[Elmer_101]_NP=D8_not_NPO?=
by "Chuck Carpenter" <w5usj@globeco.net>

49) [113699] Re: [Elmer 101] NPO
by John Wagner <john@wagner-usa.net>

50) [113700] Re: [Elmer 101] component form factors
by Mike Maiorana <mikemo@attglobal.net>

51) [113701] Poqet Replacement Recommendation
by "Bill Jones" <kd7s@psnw.com>

52) [113702] Marconi spark rig on-the-air
by "AI2Q Alex" <ai2q@adelphia.net>

53) [113703] Holiday Savings! Price Reduced on MFJ's
by NV9Z@aol.com

54) [113704] Resistors (again!)
by "Ed Tanton" <n4xy@att.net>

55) [113705] Re: [Elmer 101] NPO
by Bruce Muscolino <w6toy@erols.com>

56) [113706] RE: 1947 Handbook project info needed
by "Hare,Ed, W1RFI" <w1rfi@arrl.org>

57) [113707] [Elmer 101] Pwr Supply Question
by Somerville <somerville@uniserve.com>

58) [113708] Re: [Elmer 101] NPO
by "Tony Fishpool" <tony@g4wif.fsnet.co.uk>

59) [113709] laptops
by joe living <jliving2001@yahoo.com>

60) [113710] Re: [Elmer 101] Pwr Supply Question
by "Dave Benson" <nn1g@earthlink.net>

61) [113711] Re: [Elmer 101] component form factors
by Bruce Muscolino <w6toy@erols.com>

62) [113712] Re: laptops
by Bruce Muscolino <w6toy@erols.com>

63) [113713] G-QRP's SPRAT: Special Edition #1 "Pixie File"
by "Brice D. Hornback" <bdh@cyberbound.net>

64) [113714] Alaskans - QRP
by Jim Larsen AL7FS <AL7FS@ARRL.NET>

65) [113715] Radios in a box &c
by Nils R Young <nilsbull@juno.com>

66) [113716] Re: [Elmer 101] component form factors

by "Dave Benson" <nn1g@earthlink.net>
67) [113717] 160M Sprint
by W2AGN <w2agn@pobox.com>
68) [113718] [Elmer 101] Q6 T0-220
by "Jim Stamper" <jstamper@shentel.net>
69) [113719] Tuna tin 2
by Jfelts202@aol.com
70) [113720] Reduced Price! FS: PK-232MBX W / UPGRADE
by "Jerry Bartachek" <leadsheet@musician.org>
71) [113721] Re: Radios in a box &c
by David Hinerman <WD8CIV@worldnet.att.net>
72) [113722] RE: OT Re: fund raising
by "Hare,Ed, W1RFI" <w1rfi@arrl.org>
73) [113723] battery charger
by "Delbert Long" <ad6we@hotmail.com>
74) [113724] Re: Radios in a box &c
by "Brice D. Hornback" <bdh@cyberbound.net>
75) [113725] [Elmer 101] Components
by Mike Maiorana <mikemo@attglobal.net>
76) [113726] [Elmer 101] IC Identification & Antistatic Handling
by Somerville <somerville@uniserve.com>
77) [113727] Re: OT Re: fund raising
by Alex <kr1st@amsat.org>
78) [113728] Re: [Elmer 101] IC Identification & Antistatic Handling
by "Mike Yetsko" <myetsko@insydesw.com>
79) [113729] Re: [Elmer 101] NPO
by "John Moriarity" <k6qq@hdo.net>
80) [113730] Re: Alaskans - QRP
by Bob Patten <n4bp@yahoo.com>
81) [113731] RE: OT Re: fund raising
by "Hare,Ed, W1RFI" <w1rfi@arrl.org>
82) [113732] [Elmer 101] electrolytic capacitor
by Donn Kuse <casey.jay@gte.net>
83) [113733] Report on K2s in the CQWW
by "J. Edward \ (Ed\) Muns" <w0yk@msn.com>
84) [113734] Re: [Elmer 101] electrolytic capacitor
by DK3RED@t-online.de (Ingo, DK3RED)
85) [113735] Re: [Elmer 101] NPO; Correction
by "John Moriarity" <k6qq@hdo.net>
86) [113736] Re: OT Re: fund raising
by Alex <kr1st@amsat.org>
87) [113737] [Elmer 101] Elec. cap
by Donn Kuse <casey.jay@gte.net>
88) [113738] RE: OT Re: fund raising
by "Hare,Ed, W1RFI" <w1rfi@arrl.org>
89) [113739] Re: OT Re: fund raising
by Bruce Muscolino <w6toy@erols.com>
90) [113740] KL7Y in NOV SS qsl info ?

- by "Brockwell, Stephen E. CECOM SEC FSSE ILEX" <brockwse@fssec.army.mil>
- 91) [113741] Metered SWR Bridge
by "Arthur G. Silvers" <ags@ieee.org>
- 92) [113742] Re: LED Tuning
by "Steve Lawrence" <Steve.Lawrence@ITWFEG.COM>
- 93) [113743] Re: KL7Y in NOV SS qsl info ?
by Jim Larsen AL7FS <AL7FS@ARRL.NET>
- 94) [113744] Re: Keyer Technique
by "Steve Lawrence" <Steve.Lawrence@ITWFEG.COM>
- 95) [113745] ARRL and Band Threat
by "Karl F. Larsen" <k5di@zianet.com>
- 96) [113746] Field Day Special
by "Mark Fancher" <mmfancher@earthlink.net>
- 97) [113747] Re: Eagle CAD software
by David Hinerman <wd8civ@worldnet.att.net>
- 98) [113748] Alaskans - QRP - Good news.
by Jim Larsen AL7FS <AL7FS@ARRL.NET>
- 99) [113749] Re: [Elmer 101] component form factors
by Haines Brown <brownh@hartford-hwp.com>
- 100) [113750] Re: Note on Littlefield based kits and Ham Radio piece
by "Stuart Rohre" <rohre@arlut.utexas.edu>
- 101) [113751] Re: 160M Sprint
by Al Scanandoah <k2zn@rochester.rr.com>

Date: Sun, 02 Dec 2001 19:13:22 -0500
From: mikemo@attglobal.net
To: qrp1 <qrp-1@lehigh.edu>
Subject: [113651] [Elmer 101] Getting ready (part 1)
Message-ID: <3C0AC3A2.AB91DB24@attglobal.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Here we go!

First, READ THE MANUAL! Dave has done a great job on the manual and it contains tons of useful information. Don't worry if the "Theory of Operation" stuff goes over your head, that's why we are doing this.

Inventory your kit. If you are missing any parts, double check then contact Dave Benson for a replacement. Don't wait to do this step, it will save you grief in the long run. Also use this opportunity to familiarize yourself with identifying the components. If you have trouble identifying the components after reading the manual, post your question (with the Elmer101 subject header ;-)

Get the soldering iron, solder, desoldering braid and sponge ready.

Do you have a 12-14 volt power source? It needs to be able to supply at least 500mA to the circuit. You should avoid using switching power supplies (like out of a computer) as they are electrically noisy. A small 12 volt battery should be fine, 8 D cell batteries in series would also work. You can buy a wall transformer that will power the rig, but they are pricey. Should we post a schematic of a linear power supply for these rigs that you can build easy? I'm sure that would be a no brainer for our elmers... Should that be one of our sections?

There are some parts that you need to complete the rig that you can get from RadioShack listed here:

- 1) 5k pot RS#271-1714
- 2) 100k pot RS#271-1716
- 3) headphone jack RS#274-249
- 4) key jack RS#274-247
- 5) antenna jack RS#278-105 this is if you want a BNC antenna antenna connection.
- 6) power jack RS#274-1569
- 7) power connector RS#274-1582

The only one of these that you need ASAP is #2 as it will be used in the VFO section (next).

You will need some small hookup wire for testing and final assembly, 20 gauge stranded insulated should work well.

Check your power source output with your volt meter and verify that it is at the proper voltage. Tomorrow we will build up the power supply on the radio. This the simplest part of the whole project and a good place to start (no power, no RF ;-)

Also, Please, speak up if you need anything! Also feel free to comment on how we may run the class better (be careful, you may be volunteering ;-). All questions are welcome.

Check for the next section.

Mike Maiorana, KU4QO

archives at <http://www.xcivr.com/default.asp?view=elmer101>

Date: Sun, 2 Dec 2001 19:19:03 -0500
From: "Nick Yokanovich" <k3ny@cablespeed.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>,

"Dave Fifield" <dave@redhotradio.com>
Subject: [113652] Re: Red Hot 20 problem
Message-ID: <004101c17b90\$1dca7880\$8f00a8c0@default>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Zikes! Those little trimpots sure look alike. I checked the one remaining and it was 10K.
Since everything else was okay up to the AGC, I must have put the 500R in the AGC. Desoldering braid out, and patience, and the little pot came out intact. 10K pot back in,
and all is well again. Signals all over the place. I didn't pay enough attention to the trimpots,
assumed they were all the same, didn't inventory them, just counted how many. Now on to the Transmitter and see if I can get this puppy on the air for tomorrow night's Spartan Sprint.

Thanks, Dave!

73, Nick K3NY Arnold, MD
My name isn't Arnold and I'm not a doctor.

----- Original Message -----

From: "Dave Fifield" <dave@redhotradio.com>
To: <k3ny@cablespeed.com>; "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Sunday, December 02, 2001 17:46
Subject: Re: Red Hot 20 problem

> Give us the complete set of debugging voltage measurements
> (per the troubleshooting section of the manual) in RX and TX
> modes and then I'll be able to make a better diagnosis.
>
> RighT now I would guess that you either have a transisitor, resistor
> or trimpot incorrectly fitted.
>
> Regards,
> Dave Fifield, AD6A
>

Date: Sun, 2 Dec 2001 19:20:23 -0500

From: "ss lyon" <sslyon@megalink.net>
To: "chat qrp" <qrp-1@lehigh.edu>
Subject: [113653] More 160m?
Message-ID: <006a01c17b90\$4cc572c0\$038798ce@megalink.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I'll be playing 160m (1.810+/-) again tonite, same lousy antenna, (88' flat top up 60') but this time using a "Melt Solder HB" thingie Steve let me borrow. It's really cute and pumps out over 5w. More later.

73

AA1MY

Seabury & Sharon Lyon
99 Sparrowhawk Mtn Rd
Bethel, Me, 04217 U.S.A.
207-836-2576

Virus Protection by Norton and ZoneAlarm

Date: Sun, 02 Dec 2001 15:32:18 -0900
From: Jim Larsen AL7FS <AL7FS@ARRL.NET>
To: "qrp-1@lehigh.edu" <qrp-1@lehigh.edu>,
GQRP Mail List <GQRP@yahooogroups.com>
Subject: [113654] AL7FS - KL7Y (US and Europe) + QRP ARCI Holiday Spirits Homebrew Sprint
Message-ID: <3C0AC812.AD7CF00B@ARRL.NET>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Greetings from Alaska,

I tuned up for today's contest at 2000z and quickly made a contact on 10 meters. As I tuned the other bands, I noticed that AL7OK, John, was actively working the contest so I figured Alaska was well represented. He lives about 1 mile from me and his 1 watt was way over S9. I also figured if I took the day off, John could have a better run at all of you. I took the day off.

I will post more information on my new trip to KL7Y later this week but the rough plan calls for me to head out to KL7Y early on December 8th. I

will operate through the day and the night finishing up mid-afternoon on Sunday. This will give me lots of USA time as well as Europe (DX) time over the night.

I will be running a full five watts as I also wish to be heard by folks with marginal antennas. Dan, KL7Y, usually has a zero noise level so I can often hear very well. I will mostly not be ragchewing but running short contest length QSOs. I hope you won't mind.

KL7Y has:

- 10 Four stacked Hy-Gain 105CAs at 125/100/75/50'
- 15 Four stacked Hy-Gain 155CA at 125/100/75/50'
- 20 Hy-Gain 205BA at 125', Hy-Gain 204BA at 60'
- 40 Hy-Gain 3 el shorty forty at 160'
- 80 2 el wire beam at 140', 4 sloping dipoles at 125'
- 160 Inverted vee at 150', the 20m tower is also shunt fed
- 30 Inverted vee at 130'
- 17 4 el HB on the ground, rebuilding it
- 12 4 el Cushcraft at 140', it's broken again
- 6 6 el at 65'

After hearing how good the bands are today I wish I had made my trip this weekend...it was one of the two options I had but I was helping my son and his wife move to their new apartment and that has to come first. Think good thoughts for propagation next weekend.

73, Jim

--

Jim Larsen, AL7FS, Anchorage, Alaska
(BP51cc) - 61.101 North, 149.824 West
mailto:al7fs@arrl.net - <http://www.qsl.net/al7fs/>

Date: Sun, 2 Dec 2001 19:49:56 -0500
From: "w8diz" <w8diz@fpqrp.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [113655] Re: More 160m?
Message-ID: <001801c17b94\$6e2a3280\$21dd1b41@cinci.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Seab...

I'll also be on AGAIN but after the FP net.
I'll look for you after about 0220Z tonight

-diz, W8DIZ in Loveland, OH using the multiPIG
at 5W with a 470 ft horizontal loop.

----- Original Message -----

From: "ss lyon" <sslyon@megalink.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Sunday, December 02, 2001 7:20 PM
Subject: More 160m?

I'll be playing 160m (1.810+/-) again tonite, same lousy antenna, (88' flat
top up 60') but this time using a "Melt Solder HB" thingie Steve let me
borrow. It's really cute and pumps out over 5w. More later.

73

AA1MY

Seabury & Sharon Lyon
99 Sparrowhawk Mtn Rd
Bethel, Me, 04217 U.S.A.
207-836-2576

Virus Protection by Norton and ZoneAlarm

Date: Sun, 2 Dec 2001 17:52:58 -0700 (MST)
From: "Karl F. Larsen" <k5di@zianet.com>
To: <qrp-l@lehigh.edu>
Subject: [113656] ARCI Holiday Spirits
Message-ID: <Pine.LNX.4.33.0112021746170.2585-100000@cannac.fun>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Using QRP-Dupe and my Yaesu FT-817 I participated in this contest
even though I was at a 8,000 point handycap against anyone using a k2. I
think the rule talking to Home built should mean something like the 2N2
which you can get plans for, but no kit is available. The K2 costs more
than the Yaesu now and it's a fine kit,

The bands were in great shape and I made 25,000 points with no
Bonus points. Had to go to the store for the XYL and make some kindling,
but still had time to work most guys on 10,15,and 20 meters. Worked Randy

K7TQ the contest chairman on both 10 and 20 meters...FUN!

--

Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -
<http://www.zianet.com/k5di/>

Date: Sun, 02 Dec 2001 19:48:02 -0500
From: mikemo@attglobal.net
To: qrp1 <qrp-1@lehigh.edu>
Subject: [113657] [Elmer 101] Power supply (part 2)
Message-ID: <3C0ACBC2.226EFD43@attglobal.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

This section will cover the DC power supply section of the radio. It has the job of supplying the radio with a useable D.C. power source for the different circuit modules. There are two basic voltage supplies on the rig. There is the unregulated D.C. supply and there is a regulated 8 volt supply.

First find the following components in your kit.

D13 1N4001 Diode
C112 220 microfarad electrolytic capacitor
C102 .01 microfarad ceramic capacitor
U2 78L08 three terminal voltage regulator

As stated in the manual, many components are polarized. In other words, it matters which direction you install them. Diodes, I.C.'s and some capacitors are examples of polarized components.

Install the above components. PLEASE double check polarity and position before soldering. Reference page 11 for details on the diode install.

Connect a 2 pieces of hookup wire between the power supply connections on the circuit board and your power source. The - supply goes to ground (J4 pin 1) and the + supply goes to the +12 volts (J4 pin 2). You need to be able to easily turn this on and off, so make sure these connections are easily removed. (Don't build with the power on!!!!)

Voltages are measured with reference to ground unless otherwise specified. This means that the black (-) lead of your volt meter should be connected to the board ground, along with the power source -

connection. You can connect the meter black lead to the power supply - connection to make the following measurements.

J4 pin 2 should be the same as the power source + terminal.

Cathode of D13 should measure the Power source voltage (V_{ps}) - D13 dropping voltage (about 0.7 volts). The diode dropping voltage will vary with device and with the amount of current passing through it.

Output of the U2 voltage regulator should be about 8 volts (between 7.7 and 8.3 volts). A convenient place to measure this is at pin 1 of J2.

If you get these readings, you have built the power supply section correctly. Now on to the circuit description.

As you all know, a diode allows electrical current to pass in one direction but not in the reverse direction. When a diode cathode is more negative than the anode, it will conduct current. In this circuit, D13 is in series with the power source as it feeds the rest of the circuit. It's function is to protect the board from damage if the power leads are connected backwards. If the power leads are reversed the diode will be reverse biased and no current will flow into the circuit, saving all those little components from certain death ;-)

The disadvantage to using a series diode for polarity protection is that you lose voltage (and power) in your power supply. There are other methods of polarity protection that don't significantly affect the supply voltage or power, but are significantly more complex or use a fuse. For a simple circuit this is an excellent solution.

C102 and C112 provide decoupling on the power rail. They provide a low impedance path for any AC on the internal power system. This keeps the supply a clean D.C. voltage with a very small A.C. component.

U2 is a low power three terminal voltage regulator. It is there to provide sensitive circuits a constant voltage. The input voltage to the board is not regulated. It can be anywhere between 12 and 15 volts. Lets just say we are using a battery for the power source. All power sources have an internal resistance (usually small). As more current is drawn from the supply, the voltage drop across the internal resistance increases, decreasing the output voltage. So when we key up the transmit section and the current draw from the power source jumps, the voltage provided drops. There are certain circuit components that require a very stable voltage source. The VFO is one example of this. Imagine what the radio would sound like if the VFO frequency changed depending on how long the key was held down. (We call that chirp). This is a bad thing. So we use a linear voltage regulator to isolate the sensitive circuits from variations in the supply voltage.

The 78L08 device can take anywhere from 10.5 volts to 23 volts at its input and provide an 8 volt output. It provides overcurrent protection, short circuit protection and thermal protection (shut down if it gets too hot).

Remember that these devices are not perfect. We have looked at them up till now as a "perfect" device. They can only supply 100mA maximum. They can only dissipate a total of 700mW assuming the ambient temperature is <25 degrees C. Power dissipated by the device is equal to the voltage dropped by the device (15-8= 7 volts) times the current delivered. Notice that in this design that if the maximum current was drawn out of the device (100mA) at the maximum supply voltage (15 volts), the max power dissipation on the device is 700mW. Coincidence? I think not!

Also, variations on the input do appear at the output, although greatly attenuated. The spec is 48dB at 120Hz (full wave rectified line ripple). The power supply rejection ratio is in units of power, so the power is reduced by 48 db. This corresponds to a 4 mV change in voltage. This is one of those famous 'db voltage' vs. 'db power' problems.

$$10^{(-48/20)} = 0.004$$

In addition, the device itself uses a certain amount of power. Bias current is about 4mA. At 15 volts that equals 60 mW.

If you are curious, you can view the data sheet if your browser has a PDF reader. <http://www-s.ti.com/sc/psheets/slvs010n/slvs010n.pdf>

There is an error in the SW schematics. On the schematic, C102(0.01uF) is shown at U2's(78L08)INPUT. But how is C102 connected on the board? Its at U2's OUTPUT side. So if you measure the DC voltage across C102, you'll see +8v. Not +12v. Everyone should scratch out C102 on their schematics, and draw in a new C102 at the top of the tuning pot (J2, pin 1).

Next, we build and discuss the VFO. It will probably be done in several separate sections. Stay tuned. Ask questions if you are confused.

Mike Maiorana, KU4QO

Archives at <http://www.xcivr.com/default.asp?view=elmer101> (Thanks Steve!)

Date: Sun, 2 Dec 2001 16:52:55 -0800

From: "Trevor Jacobs" <fxtech@earthlink.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [113658] Back to the Frigid North, Middleton,WI
Message-ID: <008b01c17b94\$d894ef20\$83e8b3d1@tjacobs>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi All,

I'm heading back to Middleton,WI on business again and will be there for 2 weeks. Went by Radio Shack and bought the el-cheapo twinlead (40' for \$2.99!) and put together an antenna that I'm going to string out of the window (3rd floor) of the hotel. I'll have my FT-817 with me this time so am going to try a few different bands. Will be fun to try and bag the fox from a different QTH! I'll be on e-mail, and will let you guys know when the portable station is set up.

72/73's
Trev
KG6CYN

Date: Sun, 2 Dec 2001 19:58:36 -0500
From: "w8diz" <w8diz@fpqrp.com>
To: <qrp-1@Lehigh.EDU>, <fpqrp-1@fpqrp.com>
Subject: [113659] Eagle CAD software
Message-ID: <002301c17b95\$a3ad6d40\$21dd1b41@cinci.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Anybody out there using Eagle Cad to do schematics and PCB's?
I could use some help doing my FIRST schematic and board.

72, Diz, W8DIZ

Date: Sun, 2 Dec 2001 19:53:46 -0500
From: "Ron Polityka" <wb3aal@fast.net>
To: ".Mtn-Top" <HamRadio_Mountaintopping@yahoogroups.com>,
 ".HF Pack" <hfpack@yahoogroups.com>,

Subject: [113660] Re: AT in PA Sunday
Message-ID: <006b01c17b94\$f79507c0\$01ab5cd1@wb3aal>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello,

Well Woody and I were out on the AT in PA. We started hiking around 15:50 UTC. We hiked up to the top of the ridge north of Eckville, PA. After arriving at a camp site I had to change my shirt, it was soaked even in the 40' temperatures. We guess that up on top the temp. had to be in the high 30's.

Woody started calling CQ on 40 meters around 17:35 UTC and I was on 10 meters. I told Woody to be ready for a small pile up and that he will never get off of 40 m. I did not make any QSO's on 10 m but my 1st QSO today was with DF8BC in Germany. I will have a better count of Woody's QSO's by state when he e-mails me the list. I made 5 QSO's and they were as follows.

DF8BC on 15 m Germany
KK7JO on 15 m UT
G3MJX on 20 m England QRP to QRP over the pond
AB0RS on 20 m MN
W3IRZ on 20 m GA

We had a ball and we had great QSO's with everyone. If you missed us, you will have another chance in Jan. 2002 on my next outing. I am basically finished with going out on the AT for 2001. My total QSO count for the past 21 months is now at 247 QSO from the AT in PA. This trip was probably the last trip for the K2. I have a K1 on the way and I am going to make that my new Trail rig.

72 & 73
Ron Polityka
WB3AAL
www.n3epa.org

=====

Greetings

Ron WB3AAL and I started out on the trail about 10:30. The temperature was alright, the wind was calm but no sun. Spots of deer hair were on the trail most of the way. Obviously a hunter bagged a deer earlier in the week.

Ascending the mountain, there was a noticeable difference in temperature, at

least 10 degrees. We set up our gear at the top of the mountain, Ron with his K2 and me with a K1. I started out on 40, Ron I think was on 10m. Ron's first contact was Germany (I'll let him post the details of his QSOs).

Here were my contacts:

AA3SJ	Ed	PA
N8UM	TN	(TN QSO Party)
AA2NL	Rich	NJ
AE5X	John	NJ
K8KFJ	Gary	WV
NV9C	Mary	IN
K1SWL	Dave	CT
KG4HTT	Vic	VA

My CW sending hand was cold most of the time so I made a lot of mistakes. The sun came out when I was in QSO with Vic and it made a noticeable difference.

We packed up and headed out about 2:45. We had a great time ! Thanks to everyone who we worked and sorry we couldn't work more people. We'll get you on the next hike :-)

72
Goody
K3NG

Date: Sun, 02 Dec 2001 17:55:50 -0700
From: Brian Kassel <bkassel@dancris.com>
To: QRP-L <QRP-L@lehigh.edu>
Subject: [113661] Re: [112682] Re: 13.5 MHz IF Anybody?
Message-ID: <3C0ACD96.70E69C18@dancris.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Gangue:

For those following the thread on the characteristics of the very inexpensive 13.5 MHz. crystals being offered by the Electronic Goldmine

store, here is one more bit of data supplied by Kent Torell, who did the original crystal measurements:

"The parallel capacitance of the crystal measured 4.25 pf, with or without the case grounded (slight difference). This will help out in modeling a little."

I am putting it up on the QRP-L list rather than mailing out the many individual messages to each of the folks who have requested the original data.

Brian K7RE

Date: Sun, 02 Dec 2001 15:13:14 -0500
From: Steven Weber <kd1jv@moose.ncia.net>
To: nkennedy@tcainternet.com
Cc: qrp-l@lehigh.edu
Subject: [113662] Re: Should be simple ... 80M VFO saga continues
Message-ID: <3.0.6.32.20011202151314.0079cbc0@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

>Meanwhile, while scoping out a new project or minor modification, beware of
>these famous last words of the programmer and homebrewer:

>

>Should be simple!

Well, if faced with that problem, I'd simply use an op amp voltage summer. By picking appropriate summing resistor ratios to the op amp feed back resistor, you can get any fine/coarse tuning ratios you want. Use a modern micro-power, cmos rail to rail op amp if you want to get fancy, but any old op amp would do. Throw in a third pot and a 4066 cmos switch and add RIT too. With the op amp, you can sum any number of inputs.. (Ideally, the wiper of each pot should be buffered by an op amp voltage follower, so the summing resistors see a low impedance. But you can get away by using a low resistance pot in respect to the summing resistor, make the ratio about 1 to 10.)

But that's the neat thing about electronics, there are so many different ways to skin a cat, hi. It's often what happens to be at hand in the junk box that determines how it's done!

72,

Steve, KD1JV

"Melt Solder"

White Mountians of New Hampshire

<http://www.qsl.net/kd1jv/>

Date: Sun, 2 Dec 2001 18:01:22 -0700
From: "Rod N0RC" <rod@n0rc.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>,
"Elecraft-list" <elecraft@qth.net>
Subject: [113663] Holiday Spirits Homebrew Sprint, Soap
Message-ID: <00ee01c17b96\$07a306c0\$15ebfea9@c919125b>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Dec 2 - 2000z: SFI=245; A-index ~= 6; K-index 2; Temp 50+ Deg F;
PCDLY; Wind SE ~10-15 knots:

HMMM! Play radio contest or go for a bike ride? NO CONTEST [pun intended] Bike Ride! You don't pass on a bike ride, in December, on a day like today. So off I went for a few hours. But returned in plenty of time for some "Holiday Spirits", and glad I did! 30 QSOs, one in MD, close to DE the state I need for WAS, but alas no DE. 30 QSOs in all, and some really big sigs from, Doc. K0EVZ; Brian, K7RE; Jim, NA3V.

Even Worked the 4 corners of the continental US: N7RVD, WA; K0ZK, ME; K4BP, FL and AD6GI in CA. Not bad for 1hr50m of operating time. Station setup was K1 #709 @ 4-5W into my trusty attic dipole.

Other notable day event(s): A 30mph descent (on the bike) when the pavement suddenly turned to hard packed clay, slightly moist. :-0 That got the old heart jumpin'!

Happy Holidays
73, Rod N0RC
Ft Collins, CO

Date: Sun, 02 Dec 2001 20:06:45 -0500
From: David Hinerman <wd8civ@worldnet.att.net>
To: qrp-l@lehigh.edu

Subject: [113664] Re: Eagle CAD software
Message-ID: <3.0.6.32.20011202200645.0079fb50@postoffice.worldnet.att.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 07:58 PM 12/2/01 -0500, you wrote:

>Anybody out there using Eagle Cad to do schematics and PCB's?
>I could use some help doing my FIRST schematic and board.
>
>72, Diz, W8DIZ

Diz,

Yeah, I've been using Eagle. (When I can. The board editor has this annoying tendency to freeze up my Windows NT machine at work. Never had a problem at home on Win 95, though. To paraphrase: "Save early and often!") I've done a few small analog projects, and a board for an Atmel microcontroller.

How can I help?

Dave

Dave Hinerman
WD8CIV@worldnet.att.net

Date: Sun, 2 Dec 2001 20:33:31 -0500
From: "Tony Parks" <robert.parks11@gte.net>
To: <qrp-1@Lehigh.EDU>
Subject: [113665] Cub Fox Hunt for Tuesday 12/4
Message-ID: <001101c17b9a\$85241900\$e4f7153f@3dse0>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

There are no corn stocks to hide in this time of year here in rural Indiana....so now is your chance to bag an east central Indiana Cub Fox pelt.....

I will be on Tuesday, December 4, at 2100 EST, (0200Z-0400Z, 12/05). Look for me around 7.055 and I will be listening up 200 to 500 Hz. The rig here is a K2 at 5 watts via a 4:1 balun and ladder line to a horizontal square loop with 400 feet of wire. My code speed sending will be around 13 WPM but you can fire back a little faster than that.

The exchange will be the usual:

Fox sends: HoundCall HoundRST IN TONY 5W HoundCall BK

Hound sends: BK FoxRST HoundState HoundName HoundPower BK

I will ask for fills if needed but otherwise will send TU or 72 and QRZ.

Hope to pass out lots of pelts on Tuesday.

73,
Tony
KB9YIG

Date: Sun, 2 Dec 2001 19:22:57 -0600
From: "Glenn Butzlauff" <gbutzlauff@wi.rr.com>
To: <qrp-1@lehigh.edu>
Subject: [113666] Re: Back to the Frigid North, Middleton,WI
Message-ID: <002a01c17b99\$0a55ea60\$d3bf1d41@wi.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Trevor, the temps are predicted to be in the 50's for tomorrow, and mild with rain for the week, but falling temps and snow for Friday. Of course they said that about this weekend too and it hit 50 again near The Lake, meaning it was probably 55F in Madison. You should be able to get by with just one set of longjohns for your trip!

73 de Glenn, WE9K
Cudahy, WI

----- Original Message -----
From: Trevor Jacobs <fxtech@earthlink.net>

To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Sent: Sunday, December 02, 2001 6:52 PM
Subject: Back to the Frigid North, Middleton,WI

> Hi All,
>
> I'm heading back to Middleton,WI on business again and will be there for
> 2 weeks. Went by Radio Shack and bought the el-cheapo twinlead (40' for
> \$2.99!) and put together an antenna that I'm going to string out of the
> window (3rd floor) of the hotel. I'll have my FT-817 with me this time
> so am going to try a few different bands. Will be fun to try and bag the
> fox from a different QTH! I'll be on e-mail, and will let you guys know
> when the portable station is set up.
>
> 72/73's
> Trev
> KG6CYN
>

Date: Sun, 02 Dec 2001 20:49:47 -0500
From: David Sarraf <david.sarraf@paonline.com>
To: George Gingell <k3tks@u1.abs.net>
Cc: qrp-1@Lehigh.EDU
Subject: [113667] Re: 42 Volts and QRP?
Message-ID: <3C0ADA3B.1D895A08@paonline.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

> Actually, I am more interested in Why "42 Volts" than how it applies
to
> QRP. Maybe Lucent went in Cahoots with the Auto Manufacturers and
wanted
> to make sure that we didn't start using Telephone Batteries in the
Cars.

George:

The 42 volt maximum was selected in part due to safety requirements.
That is a European safety standard (IEC?) for the highest allowable
potential for unshielded or bare terminals. Many voltmeters and other
test instruments are now labelled to that effect.

Dave Sarraf

Date: Sun, 2 Dec 2001 21:08:20 -0500
From: Cameron Bailey <kt3a@juno.com>
To: qrp-1@lehigh.edu
Subject: [113668] FS: NorCal Rigs
Message-ID: <20011202.210821.-4032689.2.kt3a@juno.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I still have the following rigs:

NorCal 40, original club kit. No mods done. Approx. 2 watts out. \$55 ppd.

NorCal Sierra, original club kit. No mods done. Have 20/30m modules, most parts to build 15/40m modules, including xtals, plus a few extra module boards. Approx. 1 watt out. Nice rig to work mods on. \$100 ppd.

kt3a, cam

Date: Sun, 02 Dec 2001 21:14:49 -0500
From: Fred Lesnick <flesnick@tbaytel.net>
To: sslyon@megalink.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [113669] Re: More 160m?
Message-ID: <3C0AE019.32362102@tbaytel.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hello All:

It is 0212 (Dec 3 z).. I am listening on 1810 now..

Noticed a beacon or two around the frequency(but maybe hearing a harmonic or two).

The first is "BC" on 1812. The second is on 1810 I copy "VIAT" followed by long dash.

Fred
VE3FAL

ss lyon wrote:

>
> I'll be playing 160m (1.810+/-) again tonite, same lousy antenna, (88' flat
> top up 60') but this time using a "Melt Solder HB" thingie Steve let me
> borrow. It's really cute and pumps out over 5w. More later.
> 73
> AA1MY
>
> Seabury & Sharon Lyon
> 99 Sparrowhawk Mtn Rd
> Bethel, Me, 04217 U.S.A.
> 207-836-2576
>
> Virus Protection by Norton and ZoneAlarm

Date: Sun, 02 Dec 2001 19:15:50 -0700
From: Brian Kassel <bkassel@dancris.com>
To: QRP-L <QRP-L@lehigh.edu>, azqrp <azqrp@extremezone.com>
Subject: [113670] Contest: ARCI HB Sprint K7RE Results
Message-ID: <3C0AE056.7E812DBA@dancris.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Contest: ARCI Holiday Spirit HB Sprint

Category:_____HomeBrew Transceiver (K-2)_____ Mode:__CW_ Power: 5 W

Antenna 3 element trapped tribander yp 35 feet

Callsign of Operator: K7RE

Exchanged Information: K7RE 559 AZ 3623

Hours of Operation:_4____ Hours.

Band	QSOs	Points	Mult's
160	0	0	0
80	0	0	0
40	3	15	2
20	53	229	30
15	39	187	27
10	9	43	9
6	0	0	0
2	0	0	0

Totals 104 474 68

TX Power Code = 7; My member number = 3623;
Total Score: 225,624 Points

Club or Team Name:

Comments: WOW! First half hour only had 5 QSO's, then things really took off. I was very happy to work AL7JK, WL7CDC, KL7GN (GN found me on 10 and 15 AND 20). Worked VE9DX and VE9GM both in NB. Now, there have been more than a few of the ARRL events in which I missed that section. Here I worked 2 within 4 hours! Man those folks must have good ears. My goal was to get 100 QSO's, and I have met that goal. Very few stations did not have an ARCI member number to offer. Looks like ARCI is getting the word out. Sure was a fast 4 hours!
And now, for the ARS Spartan Sprint on Monday evening.

Date: Sun, 2 Dec 2001 21:36:42 -0500
From: Cameron Bailey <kt3a@juno.com>
To: qrp-l@lehigh.edu
Subject: [113671] FS: NorCal Rigs
Message-ID: <20011202.213643.-4032689.6.kt3a@juno.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Thanks, both sold.

Cam, kt3a

Date: Sun, 2 Dec 2001 18:43:27 -0800 (PST)
From: Jeff Furman <jfurman@ocs.net>
To: David Shalita <davidr@cnmnetwork.com>, qrp-l@lehigh.edu
Subject: [113672] Re: use SPICE for rf probe analysis?
Message-ID: <Pine.LNX.4.21.0112021701320.3580-1000000@ocs.net>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Dave, I'm sorry for the confusion; the Switchercad III program is the Spice simulator that just has additional models for some of Linear's parts. I

think they rewrote Spice from the ground up. I only used it to look at the rf probe as a motivating problem to try it out. I initially expected Switchercad III to be a dedicated switching power supply design/analysis tool, but it allows you to enter your own circuits and even add new models. I added the 1N5711 model and ran the transient simulation with an input at 1MHz. I needed to specify the minimum step size in order to get reasonable results. The symptom I noted was the ragged plot of the input that didn't match the expected peak-to-peak amplitude where I expected a solid, well defined sinusoid. The default step size didn't reliably sample at each peak of the input. This is not really a defect in the program, but a typical tuning issue in the use of software simulators for transient analysis. I suspect Linear Technology wrote their own version in order to better control certain of these resolution and convergence issues which can make or break switching power supply analysis. If you don't have a good intuitive idea of what result to expect, it's possible to start believing an inaccurate simulator output. Bob Pease, an outspoken analog guru at National Semiconductor, distrusts computers for this reason. I make good use of junk mail envelope backs to doodle a first order analysis to reinforce ideas. While the computer can analyze stuff instantly, only my hand analysis gives me the intuition.

As for Microcap, I have much more mileage on Microcap 5, an earlier version than the current demo.
73, Jeff AD6MX

On Sun, 2 Dec 2001, David Shalita wrote:

```
> Hi Jeff,
> I followed the URL to Linear.com.
> http://www.linear.com/software/index.html
>
> I do not see a SPICE DEMO download there that is able to do simulation
> of an RF probe ckt or any arbitrary ckt configuration.
> All I see is a SPICE Simulators
> 1. Switchercad III.....ps's
> 2. FilterCad.....filter IC's
> 3. Spice Models
> 4. Noise...in IC op amps
> 5. Prodcut catalog on CDRom.
>
> Can you clarify?
>
> Microcap SPICE sure does look very helpful.
>
> Thank you,
> 73, W6MIK, Dave
```

>
> >

--

Date: Sun, 2 Dec 2001 18:54:17 -0800
From: raoul@olympus.net (J. Benedict)
To: qrp-l@lehigh.edu
Subject: [113673] Unsubscribe?
Message-ID: <E16AjFI-0003S3-00@olympus.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I've lost the introduction to this group but would like to unsubscribe.
I've tried majordomo commands I know without success.

Can someone tell me how to unsubscribe?

Thanks

Jeff

--

Jeffrey E. Benedict * raoul@olympus.net *

A strong conviction that something must be done is the parent of many bad
measures. -- Daniel Webster

Date: Sun, 2 Dec 2001 19:57:20 -0700
From: "Bob Hightower" <nk7m@extremezone.com>
To: "qrp list" <qrp-l@lehigh.edu>, "elecraft list" <elecraft@qth.net>
Subject: [113674] ScQRPion Stinger Singer Upgrade
Message-ID: <000701c17ba6\$3acbb1e0\$f7127d3f@dell>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

We have, due to many requests, added another PIC for the Stinger Singer kit.

This chip will give an audible frequency at either 10 or 15 wpm, for those

who prefer a slower speed.

The basic kit is still available at \$20.00. A Stinger Singer + with both PIC's is available for \$23.50.

PIC's alone are offered at \$5.00 each. Please specify whether you want the slow or fast chip.

Details on how to purchase are at <http://www.extremezone.com/~nk7m/cwaafc.htm>

Bob NK7M

Date: Sun, 2 Dec 2001 21:17:58 -0600 (CST)
From: "Rich Dailey, KA80KH" <okh.npi@gte.net>
To: qrp-l@lehigh.edu
Subject: [113675] The Links
Message-ID: <3.0.16.20011203031600.584f1182@mail.gte.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Once again, my URL clipboard from QRP-L for the past week. Note: I've been asked by several if I could put these on my web site. I may archive them there later, but for now I'll just do it like this each week. It's just a simple matter to paste it to a message for the list. Thanks for all the kind words - Rich

mh101 (manhattan sw30+) material
http://www.qsl.net/w0pwe/Current_Projects/MH101/MH101.html
<http://www.qsl.net/n5ib>
<http://www.qsl.net/kb1ens/>
<http://groups.yahoo.com/group/MH101>

ka8mav galena crystal rf probe
http://www.qrpp-i.com/KA8MAV_XTAL_RF_Probe.htm

kg6ioe's rf probe
<http://www.geocities.com/alibhernlem/Radio/RFPProbe.html>
<http://www.geocities.com/alibhernlem/Radio/qrpprobe.html>

kg6ioe's probe diode test results
<http://www.geocities.com/alibhernlem/Radio/qrpprobe.html>

oh8ro's rf design programs
<http://www.netppl.fi/~jonverro>

7n3wvm super vxo

<http://www.qsl.net/7n3wvm/supervxo.html>

g3esp wide range vxo

<http://www.g3ycc.karoo.net/widevxo.html>

s57nan pocket sized smd homebrew rig

http://www.qsl.net/s57nan/ham_radio/tinka/tinka.html

lattin 5 band antenna

<http://www.g3ycc.karoo.net/lattin.htm>

vk3gjz psk31 PIC project notes

<http://members.optushome.com.au/gzimmer/default.html>

SPICE demo programs

www.linear.com/software/index.html

www.spectrum-soft.com

kb7mbi's end-fed wire links

<http://www.njqrp.org/n2cxantennas/halfer/halfer.html>

<http://www.alphalink.com.au/~parkerp/nojun98.htm>

<http://www.g3ycc.karoo.net/endfed2.html>

<http://www.geocities.com/aa5tb/efha.html>

<http://www.qsl.net/wb1gfh/antenna.html>

<http://www.cebik.com/gup12.html>

<http://www.ac6v.com/antprojects.htm>

<http://www.geocities.com/aa5tb/halfwave.html>

<http://www.hard-core-dx.com/nordicdx/antenna/feed/coax2.html>

http://www.swlink.net/~w5jh/efhwa_at.htm

QRP DXCC rules

<http://www.arrl.org/news/stories/2001/11/27/2/?nc=1>

crystal design data from icm

<http://www.icmfg.com/tech.html>

nb6m's article on converting smk-1 to 80 or 160m

<http://www.fix.net/~jparker/norcal/smk1/smk1to80160.htm>

icom alc control for QRPp

<http://home.att.net/~alan.kaul/alc.html>

w3ff walking portable

<http://www.qsl.net/w3ff/>

curiously strong superhet receiver project

<http://www.qsl.net/kq0rp/css.html>

LED zero beat indicator

http://home.earthlink.net/~n0ss/kr5l_cw_tuning_ind.pdf

Rich Dailey, KA80KH - Phyllis Dailey, KB4NPI
<<http://home1.gte.net/web22jfw/>>

Date: Sun, 2 Dec 2001 21:23:38 -0600
From: <jfox6@houston.rr.com>
To: "QRP" <qrp-1@lehigh.edu>
Subject: [113676] to unsubscribe
Message-ID: <009b01c17ba9\$e7adc8a0\$9902a8c0@houston.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

jfox6@houston.rr.com
<http://www.qsl.net/w5hir>

Date: Sun, 2 Dec 2001 20:25:28 -0700
From: "Steve Thompson" <steve@xcvr.com>
To: <qrp-1@lehigh.edu>
Subject: [113677] [Elmer 101] NPO
Message-ID: <200112022025.AA618725532@xcvr.com>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii

I've seen reference to "NPO" (in regard to capacitors) many times, and always wondered what it meant. I dug through some of my electronics references, and though none of them directly address the definition of "NPO", I gather that it probably stands for "non-polarized" ... in other words, "'da kind you you don't have to worry about which direction it gets stuffed onto the PCB".

Please confirm ... "NPO" means "non-polarized"?

Steve N7TX
Valley Ranch, TX

We do not stop playing because we grow old;
we grow old because we stop playing.

Date: Sun, 2 Dec 2001 22:38:20 -0500
From: "N8IE" <n8ie@woh.rr.com>
To: "QRP-1" <qrp-1@lehigh.edu>
Subject: [113678] Re: [Elmer 101] NPO
Message-ID: <00b701c17bab\$f6da24c0\$0300a8c0@woh.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 8bit

Steve et all,
NPO relates to the temperature coefficient and is given as "P" for positive,
"N", for negative, followed by a 3-digit value of the temperature
coefficient in ppm/ C. For example "N220", is -200 ppm/ C, and "P100" is
+100 ppm/ C. The one exception in this system is "NPO" where an "O" instead
of "0" is used, but quite a number of people use "NPO". In any event "NPO"
means stable with temperature

----- Original Message -----
From: "Steve Thompson" <steve@xcvr.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Sunday, December 02, 2001 10:25 PM
Subject: [Elmer 101] NPO

> I've seen reference to "NPO" (in regard to capacitors) many times, and
always wondered what it meant. I dug through some of my electronics
references, and though none of them directly address the definition of
"NPO", I gather that it probably stands for "non-polarized" ... in other
words, "'da kind you you don't have to worry about which direction it gets

electronics references, and though none of them directly address the definition of "NPO", I gather that it probably stands for "non-polarized" ... in other words, "'da kind you you don't have to worry about which direction it gets stuffed onto the PCB".

>

> Please confirm ... "NPO" means "non-polarized"?

BBBBBZZZZZZZZZZTTTT! But thanks for playing the game. :-) Not sure what the letters stand for, if anything. But an NPO cap exhibits a stable capacitance value over a wide temperature range. That is why you find them in OSC circuits. If the "C" changes just a little the frequency of the OSC will change, we call it DRIFT! ;-)

Why does the "C" change temperature? Heat. When current flows though a circuit, heat is developed ($I^2 R$ losses). Doesn't take much.

Look in the ARRL handbook and similar manuals for charts that show delta-C vs. temp.

Happy Holidays

73, Rod NØRC

Ft Collins, CO

Date: Mon, 03 Dec 2001 03:45:52 +0000

From: k8cz@att.net

To: "Dave WR50" <dendav@dzn.com>

Cc: "Flying Pigs" <fpqrp-1@mpna.com>, "qrp-1" <qrp-1@lehigh.EDU>

Subject: [113680] Re: [fpqrp] FOX: Truffle Hunt for 12/5 0130 UTC

Message-ID:

<20011203034552.MVMY28078.mtiwmhc23.worldnet.att.net@webmail.worldnet.att.net>

Not to mention its the most fun you can have with your clothes on.

Are we allowed to say that on the list?? Doesn't matter, I just did.

--

73,72, 00

FP #41 Fists #2360 ARCI #9606

Norcal ARRL

Hamilton, Ohio

EM79ri

Tom, K8CZ

>

> Who: WR50
> What: The Truffle
> When: 0130 5 December UTC (30 minutes before Tony, KB9YIG)
> Where: Between 7.042 and 7.046
> Why: Because I'm a masochist :-)
>
> My info:
>
> URCALL 559 DAVE TX 5W URCALL BK
>
> If I need a repeat, I'll ask. If I got it all, you'll hear:
>
> TU ES 00 QRZ? DE WR50
>
> I'm hoping for really good conditions this time around. I should be able to
> break into double digits :-D. I hope to hear you in the hogpile.
>
> ADVERTISEMENT:
> If you enjoy pileups, consider living life on the razor's edge and being a
> Truffle. It's about the quickest 30 minutes you'll spend on the air. Who
> knows, you might just become addicted to it!
>
> There are still dates available. Check out the schedule at:
>
> www.fpqrp.com/pig_hunt.html
>
> Volunteers can drop an e-mail to:
>
> w8pig@yahoo.com
>
> Thanks and hope to see you there!
>
> 72/73 es oo,
>
> Dave Winfield, WR50
> El Paso, Texas DM61ts
>
> FP#-109, SOC 371, ARS 996, Zombie #793
>
> -To unsubscribe, mail to majordomo@fpqrp.com, msg: unsubscribe fpqrp-l -

Date: Sun, 02 Dec 2001 23:18:19 -0500
From: Kenneth Hoglund <hoglund@wfu.edu>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [113681] A Bargain at Any Price
Message-ID: <3C0AFD0B.6894C15F@wfu.edu>

MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Gang--

Did the weekly grocery run for the family this evening and while racing around the aisles I found a General Mills special: two 15oz boxes of Cheerios for \$4.99.

But, packed between them was a nifty "retro lunchbox" in metal featuring the Lone Ranger! Box is 5 X 4 X 2 inches. Plenty of room for all sorts of interesting rigs. Maybe a monobander ("lone") or a monobander plus plug in extra band ("Tonto module"): hey Kimosabe?

You know you're a qrp'r when....you fall for these kinds of things!

Enjoying my retro lunchbox,

Ken KG4FGC

Date: Sun, 02 Dec 2001 23:46:11 -0500
From: Stephen Trier <sct@kg8ih.cit.cwru.edu>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [113682] Re: HB:TEST EQUIPMENT
Message-ID: <3.0.6.32.20011202234611.008fc310@kg8ih.cit.cwru.edu>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Wow, lots of good ideas from everyone!

If you are up for an ambitious project, you could build a spectrum analyzer or a network analyzer, or just a panadaptor for your favorite QRP rig. A couple of plans for spectrum analyzers have been published. The most recent one that I recall was by Wes Hayward and Terry White and was in either QST or QEX. Kanga US has boards and parts kits available for it.

Stephen

--
Stephen Trier KG8IH "File names are infinite in length where
sct@po.cwru.edu infinity is set to 255 characters."
 -- Peter Collinson, "The Unix File System"

Date: Sun, 02 Dec 2001 23:49:49 -0500
From: Hank Kohl K8DD <k8dd@arrl.net>
To: qrp-l@lehigh.edu
Subject: [113683] Dayton 2002 Rooms Pre-Announcement
Message-ID: <5.1.0.14.2.20011202233214.02a09080@mail.arenet.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

A couple of people have asked about Dayton 2002 rooms.

If you had a room in 2001 you are on the list for a 2002 room, if you want one - we filled 113 rooms in 2001.

Those who cancelled or didn't confirm are not on the list.

In January I will poll the 2001 list to see who wants rooms and then open it up.

For 2002 I will probably set up an email account on hotmail.com or netscape.net strictly for Dayton 2002 so nothing gets lost in my email program!

73 Hank K8DD

Date: Sat, 17 Nov 2001 17:49:17 -0600
From: Oscar A Hoyt <k5ubs@juno.com>
To: qrp-l@lehigh.edu
Subject: [113684] Re: That old B Battery
Message-ID: <20011117.174930.-80107.1.k5ubs@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

I know this is an old subject but just now today got the e-mails about it... Juno had held up about seven hundred (700) e-mails for my address.

Sure is good to see so many young hams on the list, that is judging by the discussion about "B" batteries.
My first radio was a Boy Scout product that used 2 - 3V4's and was powered by a 90 volt "B" batt and a 1.5 volt cell for the fillaments. Other "B" batteries were 22.5 and 45 volt. There was also a "C" battery (not the C size cell you buy today) that was 4.5 volt and it was used for bias voltage on some radio's. In fact I just bought 4 22.5 volt

batteries at the 1st Saturday sidewalk sale in Dallas, they look old but still measure 22.5v. Hope to use them to revive the first ever QRP tx I built using a 1T4 tube.

On Thu, 29 Nov 2001 13:20:10 -0500 "Mike Yetzko" <myetsko@insydesw.com> writes:

> Hmm, that does ring a bell... The fact that there were two
> 'purposes'
> to the batteries. And the "A" batteries were low voltage high
> current
> for filament, and the "B" were high voltage for the relatively low
> current
> high impedance of the tube circuits.
>
> Mike
>
> ----- Original Message -----
> From: "Jim Campbell" <jim-c@nc.rr.com>
>
>
> > I looked in "The Radio Handbook" Seventh Edition, 1951 and it
> talks
> > about "A" and "B" batteries or cells. While it doesn't say so
> > specifically, the inference is that "A" batteries were used for
> filament
> > voltages and "B" batteries were used for plate voltages. Several
> > voltages were mentioned in conjunction with "B" batteries, so I
> don't
> > believe that there was a standard voltage for them.
> >
> > Jim
> > W4BQP
> >

Oscar Hoyt, ham since '55, K2 # 2264, ARRL, QCWA, QRP-L 1733, ARCI,
NORCAL, SOC # 303 303

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<http://dl.www.juno.com/get/web/>.

Date: Mon, 3 Dec 2001 00:27:01 EST

From: K5KW@aol.com

To: qrp-l@lehigh.edu

Subject: [113685] QRP Contact, NB6M-K5KW
Message-ID: <fc.1000bfb9.293c6725@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Gang,

I'm not bragging, but Wayne, NB6M, sure should be! Heard him calling CQ tonight on 3686 at 0437 Z and answered him with my K2 at 5 watts into a G5RV. Wayne's SMK-1 converted to 80 meters was sufficiently above the noise level (high) for me to give him an RST 339 report on his signal peaks, with considerable QSB in between. Heard him over a distance of 1,487 miles computed from coordinates at my driveway and for his city. Nice going, Wayne!!

72,

Don, K5KW

Date: Mon, 03 Dec 2001 05:43:09
From: "Brad Hernlem" <alihernlem@hotmail.com>
To: w8diz@fpqrp.com
Cc: qrp-1@lehigh.edu
Subject: [113686] Re: Eagle CAD software
Message-ID: <F230PpBpcXCXWtjik3800028f1a@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

>Anybody out there using Eagle Cad to do schematics and PCB's?
>I could use some help doing my FIRST schematic and board.

>72, Diz, W8DIZ

I use it for PCB layout but not so much for schematics (I just can't seem to learn anything faster than by hand). For PCB it is quite nice. At least it is better than what I was doing (LaTeX figures!). It is limited in board area though, if you are using the free version. I print the layout on glossy paper (magazine pages) and then iron the toner onto my board, etch, etc.

BTW, there are vacuum tube schematic and board layout libraries on the Eagle site.

Brad KG6IOE

Get your FREE download of MSN Explorer at <http://explorer.msn.com/intl.asp>

Date: Sun, 2 Dec 2001 22:53:38 -0600
From: "Jean and Gary Hanson" <hansongr@uts.cc.utexas.edu>
To: <qrp-1@listserv.lehigh.edu>
Subject: [113687] Surface Mount Crystals ???
Message-ID: <LOBBIDCEEJCNEHDHFPBNIEFECAAA.hansongr@uts.cc.utexas.edu>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi guys,

I wonder if any of you have experimented with surface mount microprocessor crystals for IF filters in a receiver design? I see them in the Mouser catalog listed as CSM-7 and CSM-8A on page 323 of catalog #608, the most recent one.

Anyone measured their parameters such as motional inductance? Resistance? I assume they have a different parallel crystal capacitance, C_0 , than the standard 3.5 we assume for the HC49 types because they are packaged quite differently. Any guess as to what it might be?

I had good luck making a 4-pole Cohn filter for my 2N222 receiver a few years back using the G3UUR method from QRP Power to measure the crystal parameters, but I haven't figured out a good way to "plug" those little SMT babies in the crystal holder for my oscillator. <grin>

My intuition tells me that the smaller surface size will decrease the crystal Q . Hence, they won't be as "active" and they won't work as well in a Cohn filter. BUT, I thought it might be fun to try. Anyone been there, done that?

Thanks for the help,

Gary, KJ5VW

Date: Sun, 2 Dec 2001 21:26:28 -0800
From: "Doug Hendricks" <ki6ds@dospalos.org>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [113688] Fall QRPp to the Printers Tomorrow!!

Message-ID: <001301c17bbb\$1173ff40\$1fa3ad40@dospalos.org>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 8bit

Whew!! Great day today. Went to the NorCal meeting, more on that in another post, and came home and finished up the Fall issue of QRPP. This is the special issue of one page (or thereabouts) articles. The cover is the table of contents, and it takes all of the front cover, plus most of the inside front cover to list the articles. Looks like the cover of 73 used to look back in the 70's when it was filled, and I mean filled with articles. You still have time to subscribe and get this issue, but you better send it in Monday, because Paul Maciel is going to do the labels next weekend and ship them to me next Monday. To subscribe to QRPP, send \$15 to Jim Cates at:

Jim Cates
3241 Eastwood Dr.
Sacramento, CA 95820

Please make check to Jim, and not NorCal. DX is \$20 per year. Ok, here is the table of contents for the fall issue. You will notice some familiar names on this list.

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72, Doug

Date: Mon, 03 Dec 2001 06:31:46 +0000
From: "Dennis Ponsness" <wb0wao@hotmail.com>
To: rod@n0rc.com, qrp-l@Lehigh.EDU
Subject: [113689] Re: [Elmer 101] NPO
Message-ID: <F136FKpRcTCi90gP8yJ00016a48@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

> > I've seen reference to "NPO" (in regard to capacitors) many times,
> and always wondered what it meant.

> From what I understand it is NP(Zero) meaning zero change due to
> temperature. Kinda like 0% tolerance.

72

Dennis Ponsness - WB0WAO
EN84ij Iosco Cty, Mich.
WAC WAS DXCC VUCC WPX
NJ-QRP #329 QRP-L #2348
FP #-347 SOC#499
Web Page <http://www.qsl.net/wb0wao>

Get your FREE download of MSN Explorer at <http://explorer.msn.com/intl.asp>

Date: Mon, 3 Dec 2001 02:40:12 EST
From: NB6M@aol.com
To: QRP-L@lehigh.edu
Subject: [113690] Further DX, and a very special thrill on 3.686

Message-ID: <153.50dddcdb.293c865c@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Hi All,

I got on the air on 3.686 briefly in late afternoon, and then, again, just after 8:30 PM local time.

Just after 4:00 PM, California time, I learned that the band is open at that time of day for some of the more "local" contacts, as Jim, W6EU, in Truckee, California, heard me doing some brief testing, and gave me a call, with the result that we had a very nice chat.

Then, I had to QRT for supper, and then go pick my wife up from her workplace and bring her home.

When I put the little SMK80 on the air after returning home, I got a real surprise and a contact which is definitely the high point of my SMK-1 operation so far, and brought back many memories of my early Ham Radio days.

I called CQ, and Don, K5KW, answered me. As I answered his Q5 and about S6 signal, and sent the first round of info, I was thinking that he might be in New Mexico, or, maybe as far away as west Texas, if I was lucky and he wasn't a transplanted W5 who was living in California.

Then, when he sent his name and QTH, I found out that Don is in Fort Gibson, Oklahoma.....

Well, that not only was a real thrill because of the fact that he was even hearing me in eastern Oklahoma, but I used to live in Fort Gibson, Oklahoma, and while living there, in 1957, when I was 14 years old, I got my first Amateur Radio license, Novice Class, and made my first contacts using the Heathkit DX-40 that my Dad had bought for me as a kit, and that I had built.

What a thrill!

That very first transmitter put out 75 Watts, which was the most power that a Novice Class licensee could run in those days, and was strictly Crystal Controlled, as required by the rules governing the Novice Class license. The receiver I was using at the time was an old Philco "all band" AM receiver, with a BFO added.

Now, here I was, 44 years later, talking to a ham in my old home town in Oklahoma, from California, with him running 5 Watts and me running 750 Milliwatts, think of it, one one-hundredth of the power I used to run in that old tube rig (which I still have), and while operating another crystal

controlled rig.

Don, K5KW, you definitely made my day!

After the marvelous DX QSO with Don, K5KW, in my old home town, I had a shorter QSO with Howard, W7ILW, in Prescott, Arizona, which was shortened unintentionally by QSB.

Then, N6RNP, Alan, in Chico, California, answered my CQ, and we ended up having one of the wonderfully long, leasurely types of QSOs that seem to personify the 80 Meter band.

The only negative aspect of that long QSO is that I found out, later, through email, that Eric, NM5M, in Plano, Texas, was copying 80 percent of the QSO, and I could have probably had a contact with him, as well. NEXT TIME!

In short, putting the little SMK-1 on 80 Meters has already given me such returns in pleasure and thrills that it is hard to balance them against the relatively small amount of work involved in doing so.

What I am finding, again, is that during this time of the year, 80 Meter propagation is more like what we find on 40 during the rest of the year. And the band is less crowded (less QRM), and yet seems to supply more than enough QSOs, of both the friendly Rag Chew and intermediate DX types.

See you there.

72

Wayne NB6M

Date: Mon, 3 Dec 2001 04:58:38 -0500
From: Haines Brown <brownh@hartford-hwp.com>
To: mikemo@attglobal.net
Cc: qrp-1@Lehigh.EDU
Subject: [113691] [Elmer 101] component form factors
Message-ID: <200112030958.fB39wch07379@hartford-hwp.com>

I'm wrapping a general question around a specific one of lesser interest.

The specific question is that I have an apparent part substitution for Q6. It is identified in the parts list as being a 2SC2078 or 2SC1678. However, what I think is Q6 among my parts is labelled C2166.

In deciding if this is right, I next looked at the layout drawing, but that did not help because Q6 is viewed there on end. So then I considered the component's form factor. In the parts list it is described as a "T0-220 device," and this gives rise to my general question.

For my "C2166" to be Q6, it would have to have a T0-220 form factor, and presumably therefore have a small square plastic body with three heavy leads projecting from one edge and a heat sink tab with a hole in it for being screwed down, from the opposite edge.

So my question is, where do I find such information? At several points in the parts list there are references to the form of the component. For example, some ceramic capacitors and mono capacitors are referred to as "NPO" and others not. What does that mean? D1 and U2 are T0-92.

Is there some handy reference that defines the size and shape of the various form factors? Do folks with experience tend to remember the more common designations, or do they look it up as needed?

Haines KG1GRM

Date: Mon, 03 Dec 2001 05:39:58 -0500
From: Pete Burbank <plburbank@kih.net>
To: qrp-l@lehigh.edu
Subject: [113692] HB: Fun Material
Message-ID: <5.0.2.1.0.20011203045715.00aa6db0@KIH.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Needed some plastic for homebrew paddle so went to Wal-mart and bought a couple fluorescent clip boards. The handle is really bright....actually outrageous. The stuff is best worked with hand tools as it smears easily with heat. The paddles are made from the innards of a fairly hefty chopper relay purchased surplus. The paddle should go well with the completed Tuna Tin 2 (which is also outrageous). Today I got together the parts to breadboard W7Z0Is 555 keyer ("Solid State Design") since I dislike switching cables.

Maybe will get the TT2 on 40 tmrw at 300 Mw .
73 Pete NV4V

Date: Mon, 3 Dec 2001 08:12:07 -0500
From: "Kwik, Ed " <ed.kwik@delphiauto.com>
To: "QRP-L (E-mail)" <qrp-l@Lehigh.EDU>
Subject: [113693] Michigan QRP Net Tuesday 9:00 PM Eastern Time on 3.535MHz
Message-ID:
<9F176F70FD71AC48AFC36F879D2B84E38F3623@tryexch01.NorthAmerica.DelphiAuto.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

Just a reminder that the Michigan QRP net meets on Tuesday nights at =
9:00 PM
on 3.535 MHz. Last week we had eight check ins from seven states:

	S	R	
1128=D81 3.535 CW K25W W8IQB	579	579	BRISTOL MI LOWELL
1128=D81 3.535 CW K25W KI3R	579	559	PORT VUE PA TOM=20
1128=D81 3.535 CW K25W W8EGI	579	599	EAST LANSING MI DON=20
1128=D81 3.535 CW K25W W2BVH	559	559	CRANFORD NJ LENNY=20
1128=D81 3.535 CW K25W KA3WMJ	559		ERWINNA PA KEN=20
1128=D81 3.535 CW K25W AA=D8B	339	359	COLUMBIA MO ROY=20
1128=D81 3.535 CW K25W WA8BXN	579	579	KIRTLAND OH MIKE=20
1128=D81 3.535 CW K25W AE4IC	559	559	GREENSBORO NC BOB=20

Ed AB8DF Waterford, MI

Date: Mon, 3 Dec 2001 08:26:53 -0500
From: W2AGN <w2agn@pobox.com>
To: Jim Larsen AL7FS <AL7FS@ARRL.NET>,
 "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [113694] Re: AL7FS - KL7Y (US and Europe) + QRP ARCI Holiday Spirits
Homebrew Sprint
Message-ID: <01120308265300.12206@njbirdman>
Content-Type: text/plain;
 charset="iso-8859-1"
MIME-Version: 1.0
Content-Transfer-Encoding: 8bit

On Sunday 02 December 2001 19:32, Jim Larsen AL7FS wrote:
> Greetings from Alaska,
>
> I tuned up for today's contest at 2000z and quickly made a contact on 10

> meters. As I tuned the other bands, I noticed that AL70K, John, was
> actively working the contest so I figured Alaska was well represented.
> He lives about 1 mile from me and his 1 watt was way over S9. I also
> figured if I took the day off, John could have a better run at all of
> you. I took the day off.

--

Did not work John, but did work KL7GN with my little 1 watt in the Sprint. He actually answered my CQ!! Spilled my Pepsi down my shirt!

John L Sielke W2AGN
w2agn@pobox.com
<http://www.qsl.net/w2agn>

Date: Mon, 3 Dec 2001 13:14:22 -0000
From: "Leon Heller" <leon_heller@hotmail.com>
To: "Low Power" <qrp-1@Lehigh.EDU>
Subject: [113695] 13.5 MHz crystal filter
Message-ID: <DAV49yS7SqjBEde3ssw0001908d@hotmail.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Based on the data Brian obtained for some of the 13.5 MHz crystals he recently acquired very cheaply, I designed a four crystal filter and simulated it. 'Design' probably isn't the right term, as I have a spreadsheet set up for it and the process just takes a few seconds.

The configuration is as follows:

```

  --X---X---X---X--
  |           |           |           |
C2   C1   C0   C1   C2
  |           |           |           |
----- GND
```

With an I/O impedance of 200 ohms the capacitance values came out at

C0 = 166.7pF
C1 = 107.3pF
C2 = 24.4pF

I chose an impedance of 200 ohms because you need low impedances with higher frequency crystals to get a sufficiently narrow bandwidth. Also, it is easy to match to 50 ohms using a couple of 1:4 broadband transformers.

The PSPICE simulation showed it would make a reasonable SSB filter, with a bandwidth of about 2 kHz and quite a good shape factor. Two of them in series should make a really excellent filter. Or, one filter could precede the IF amplifier and the other used as a tail end filter to minimise wideband noise.

If anyone would like the PSPICE schematic, or a GIF of the PSPICE response plot, please let me know.

I'll see what I can do about a narrower filter for CW.

73, Leon

--

Leon Heller, G1HSM leon_heller@hotmail.com

http://www.geocities.com/leon_heller

Low-cost Altera Flex design kit: <http://www.leonheller.com>

Date: Mon, 03 Dec 2001 08:49:05 -0500
From: Mike Maiorana <mikemo@attglobal.net>
To: steve@xcvr.com
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [113696] Re: [Elmer 101] NPO
Message-ID: <3C0B82D1.D0090AB3@attglobal.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Steve (all),

Here is a interesting link to a Caltech website that describes some different capacitor types and their properties. The COG are similar to the NPO that you asked about. BTW, it is a Zero, not an "oh" in the NPO name. They are certainly non-polarized, and their main quality is their temperature stability. Temperature stability is critical in oscillator and some tuning circuits. Capacitor design is a tradeoff between size, cost, stability, ESR, ESL, aging and tolerance (and probably many other factors).

<http://leonardo.eeug.caltech.edu/~ee14/lab1cds.html>

Mike Maiorana, KU4QO

Steve Thompson wrote:

>

> I've seen reference to "NPO" (in regard to capacitors) many times, and always wondered what it meant. I dug through some of my electronics references, and though none of them directly address the definition of "NPO", I gather that it probably stands for "non-polarized" ... in other words, "'da kind you you don't have to worry about which direction it gets stuffed onto the PCB".

Date: Mon, 03 Dec 2001 08:05:22 -0600

From: Jim Giammanco <giamman@rouge.phys.lsu.edu>

To: qrp-l@lehigh.edu

Subject: [113697] SS log submission troubles from N3FJP logger

Message-ID: <3.0.1.32.20011203080522.007f4b60@127.0.0.1>

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

Has anyone else experienced problems submitting the Cabrillo file to ARRL as produced by the N3FJP logger.

Mine keeps getting bounced by the robot.

72

Jim N5IB

Date: Mon, 03 Dec 2001 08:13:15 -0600

From: "Chuck Carpenter" <w5usj@globeco.net>

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Subject: [113698] =?iso-8859-1?Q?Re:_[Elmer_101]_NP=D8_not_NPO?=>

Message-ID: <3.0.2.32.20011203081315.00864c20@mail.globeco.net>

Mime-Version: 1.0

Content-Type: text/plain; charset="iso-8859-1"

Content-Transfer-Encoding: quoted-printable

That's correct,

NPO(oh) is actually NP=D8 indicating minimal to no change with temperature.

>> > I've seen reference to "NPO" (in regard to capacitors) many times,
>>and always wondered what it meant.

>

>>From what I understand it is NP(Zero) meaning zero change due to=20
>temperature. Kinda like 0% tolerance.

Chuck Carpenter, W5USJ, Point, Rains Co., TX - EM22cv, NETXQRP #1
QRP-ARCI #5422, QRP-L #1306, SOC #57, Six Club #201, SMIRK #6275
Zombie #759, QRPp-I #115, Visit NETXQRP Web Site: <http://www.netxqrp.org>

Date: Mon, 03 Dec 2001 09:30:04 -0500
From: John Wagner <john@wagner-usa.net>
To: unlisted-recipients;; (no To-header on input)
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [113699] Re: [Elmer 101] NPO
Message-ID: <3C0B8C6C.E0AEA02F@wagner-usa.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Some folks may find this PDF file about Caps authored by NA5N
instructive:

<http://www.btinternet.com/~g4wif/na5n.pdf>

73 de John, N1Q0

Mike Maiorana wrote:

>
> Steve (all),
> Here is a interesting link to a Caltech website that describes some
> different capacitor types and their properties. The C0G are similar to
> the NPO that you asked about. BTW, it is a Zero, not an "oh" in the NPO
> name. They are certainly non-polarized, and their main quality is their
> temperature stability. Temperature stability is critical in oscillator
> and some tuning circuits. Capacitor design is a tradeoff between size,
> cost, stability, ESR, ESL, aging and tolerance (and probably many other
> factors).
>
> <http://leonardo.eeug.caltech.edu/~ee14/lab1cds.html>
>
> Mike Maiorana, KU4Q0
>
> Steve Thompson wrote:
> >
> > I've seen reference to "NPO" (in regard to capacitors) many times, and always
wondered what it meant. I dug through some of my electronics references, and

though none of them directly address the definition of "NPO", I gather that it probably stands for "non-polarized" ... in other words, "'da kind you you don't have to worry about which direction it gets stuffed onto the PCB".

--

John Wagner - john@wagner-usa.net
Web page: <http://www.neknetwork.com>

Date: Mon, 03 Dec 2001 09:45:17 -0500
From: Mike Maiorana <mikemo@attglobal.net>
To: brownh@hartford-hwp.com
Cc: qrp-1@lehigh.edu
Subject: [113700] Re: [Elmer 101] component form factors
Message-ID: <3C0B8FFD.F821AE87@attglobal.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I didn't actually look at the part number on the Q6 in my kit. I'll look tonight, but I'll assume that it is a substitute for the 2SC2078. When you see a C2166 on a transistor it usually means 2SC2166.

This is a data sheet for an equivalent part, NTE235.
<http://www.ntecinc.com/specs/200to299/pdf/nte235.pdf>

These parts also show up as replacements.
2SC2078, 2SC1306, 2SC2075, 2SD636, 2SD637, 2SD1199, 2SC2078, ECG16
I'm sure there are more. Likely that are dozens of parts that would work properly in this application. Perhaps when we get to the final amplifier section we can discuss what makes the transistor work in this application and what characteristics are important to its function.

As for form factor, you are correct that the T0-220 is the big plastic transistor. A good place to see a list of "standard" component outlines is in the back of the ARRL Handbook.

Mike Maiorana, KU4QO

Haines Brown wrote:

> The specific question is that I have an apparent part substitution
> for Q6. It is identified in the parts list as being a 2SC2078 or
> 2SC1678. However, what I think is Q6 among my parts is labelled
> C2166.

> Is there some handy reference that defines the size and shape of the
> various form factors? Do folks with experience tend to remember the

> more common designations, or do they look it up as needed?
>
> Haines KG1GRM

Date: Mon, 3 Dec 2001 06:50:35 -0800
From: "Bill Jones" <kd7s@psnw.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [113701] Poqet Replacement Recommendation
Message-ID: <000701c17c09\$de681ec0\$2f8b6bd1@j3s0p2>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Friends,

I have a pair of Poqet palmtop computers that I absolutely love and use almost daily. However, I want to upgrade to a palmtop with just a little more horsepower. I am looking for your suggestions and recommendations that will fit somewhere around the \$200-\$250 price range on the used market.

=====
Bill Jones -- KD7S -- <><
Our job is to love others
without stopping to inquire
whether or not they are worthy
=====

Date: Mon, 3 Dec 2001 09:52:32 -0500
From: "AI2Q Alex" <ai2q@adelphia.net>
To: "QRP-L (E-mail)" <qrp-1@Lehigh.EDU>
Subject: [113702] Marconi spark rig on-the-air
Message-ID: <001001c17c0a\$241297c0\$6401a8c0@alex>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi all:

Just a reminder that the RAC (Canada) will likely be hosting an unusual spark transmission on December 12th. As of today, details are as follows.

Vy 73, AI2Q, Alex in Kennebunk, Maine QRP-L 687 .-.-.

80 metre spark transmission on Marconi anniversary

"Atlantic-leap 2001 "

David Wilson VE3BBN in St David's Ontario near Niagara Falls, is seeking approval from Industry Canada for a special event transmission using a home made spark transmitter. The event will take place on December 12th 2001, at 9 pm local eastern time, (0200 UTC), to celebrate the 100th anniversary of Marconi's historic transatlantic transmission of the letter "S" from Poldhu Cornwall to St John's Newfoundland in 1901.

The frequency will be 3.550 MHz , the output power approximately 20 watts, and the signal bandwidth 20 kHz.

Radio amateurs in all countries are encouraged to listen and to provide signal reports.

To listen to the spark transmission your receiver should be set to the AM mode to get the most signal possible. David plans to transmit 60 times on the minute the following message " MARCONI S ", then rest for about 45 seconds and repeat the sequence.

QSL messages should be sent to VE3BBN@rac.ca and reports should include "name, QTH, signal report and distance as the crow flies from Niagara Falls Ontario.

Date: Mon, 3 Dec 2001 10:53:06 EST
From: NV9Z@aol.com
To: qrp-l@lehigh.edu
Subject: [113703] Holiday Savings! Price Reduced on MFJ's
Message-ID: <15f.4ee55ea.293cf9e2@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Hi QRPers!

Price reduced on my MFJ-9020 and 9040, both with keyer and cw filter modules installed. \$150.00 each or buy the pair for \$300.00. Prices include shipping via USPS Priority Mail CONUS.

Santa is on a tight budget this year. The only way I am going to get my QRP Plus is to sell these rigs first.

Please contact me off list at NV9Z@aol.com.

Very 73/72 and Happy Holidays to ALL!!

Chris Blaase NV9Z QRP-L #2370

Date: Mon, 3 Dec 2001 11:04:19 -0500
From: "Ed Tanton" <n4xy@att.net>
To: "'Low Power Amateur Radio Discussion'" <qrp-l@Lehigh.EDU>
Subject: [113704] Resistors (again!)
Message-ID: <004c01c17c14\$2aeaddf0\$17ec5b0c@n4xy>
MIME-Version: 1.0
Content-Type: text/plain;
charset="us-ascii"
Content-Transfer-Encoding: 7bit

Can somebody set me straight about carbon comp vs carbon film vs metal film at RF freqs?

73 Ed Tanton N4XY <n4xy@arrl.net>

Ed Tanton N4XY
189 Pioneer Trail
Marietta, GA 30068-3466

website: <http://www.n4xy.com>

All emails <IN> & <OUT> checked by
Norton AntiVirus with AutoProtect

LM: ARRL QCWA AMSAT & INDEXA;
SEDXC NCDXA GACW QRP-ARCI
OK-QRP QRP-L #758 K2 (FT) #00057

Date: Mon, 03 Dec 2001 11:08:28 -0500

From: Bruce Muscolino <w6toy@erols.com>
To: steve@xcvr.com
Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>
Subject: [113705] Re: [Elmer 101] NPO
Message-ID: <3C0BA37C.F5CE341@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I don't know what electronics texts you have used but NPO does not mean NON POLARIZED. Throw away any books that tell you that!

NPO is used to indicate the temperature coefficient of a capacitor. NPO capacitors change capacity NEGATIVELY with respect to rising temperature. Regular capacitors have a POSITIVE temperature coefficient, meaning they increase capacity with increasing temperature. You can combine regular capacitors with NPO capacitors to achieve a close to zero temperature coefficient, thus reducing drift.

While I am at it, ASSUMING what something means only leads to mistakes. You did the right thing, you asked.

73

Date: Mon, 3 Dec 2001 11:11:40 -0500
From: "Hare,Ed, W1RFI" <w1rfi@arrl.org>
To: "'WE7X@aol.com'" <WE7X@aol.com>,
Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Cc: TIS <tis@arrl.org>
Subject: [113706] RE: 1947 Handbook project info needed
Message-ID: <125490A005E3D3118C9C00805FC743CC03390E52@KAHLESS>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Hi, Rod,

I have asked our Tech info guy to ensure that the page number is correct and send you a copy.

73,
Ed Hare, W1RFI
ARRL Lab
225 Main St
Newington, CT 06111

Tel: 860-594-0318
Internet: w1rfi@arrl.org
Web: <http://www.arrl.org/tis>

> -----Original Message-----

> From: WE7X@aol.com [mailto:WE7X@aol.com]
> Sent: Saturday, December 01, 2001 9:26 PM
> To: Low Power Amateur Radio Discussion
> Subject: 1947 Handbook project info needed

>

>

> I recently picked up a HB RF signal monitor scope. According
> to a note in
> the case, it was built from an article in the 1947 Handbook, pp 406.

> Is there any chance someone would have a copy of that
> handbook, or maybe

> one of a close year? The device seems to work, but I would
> like a bit more

> info on operation, specs and hookup details.

> The circuit uses a rectifier tube and a #913 tube as a CRT display.

> I would like to get a copy of the original article.

> Rod

> WE7X

> Issaquah, WA.

>

>

>

Date: Mon, 03 Dec 2001 08:07:51 -0500
From: Somerville <somerville@uniserve.com>
To: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [113707] [Elmer 101] Pwr Supply Question
Message-ID: <3C0B7926.3BA981@uniserve.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

According to the notes the 78L08 delivers 100 mA at 8V, $P = IV = 8V \times 0.1A = 0.8$ Watts, however the rig delivers 2-2.5 watts according to the specs. Where have I goofed?

Regards John/VE7CFG

Date: Mon, 3 Dec 2001 16:20:12 -0000
From: "Tony Fishpool" <tony@g4wif.fsnet.co.uk>
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [113708] Re: [Elmer 101] NPO
Message-ID: <005501c17c16\$643368a0\$6f0387d9@duroon>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

John quoted the old address for the GQRP web pages which are at
www.gqrp.com but you can get to Paul's datasheet with the direct URL of
:-
<http://www.g4wif.fsnet.co.uk/na5n.pdf>

The "btinternet" version may not be as up to date.

Kind regards
Tony - G4WIF

----- Original Message -----
From: "John Wagner" <john@wagner-usa.net>

> Some folks may find this PDF file about Caps authored by NA5N
> instructive:
>
> <http://www.btinternet.com/~g4wif/na5n.pdf>
>
> 73 de John, N1QO
>
> Mike Maiorana wrote:

Date: Mon, 3 Dec 2001 08:22:29 -0800 (PST)
From: joe living <jliving2001@yahoo.com>
To: qrp-1@lehigh.edu
Subject: [113709] laptops
Message-ID: <20011203162229.37754.qmail@web10602.mail.yahoo.com>
MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii

Dear gang

I'd like to get a laptop to wrk the digital modes especially psk31. I need one that will also serve the rest of the family many of whom are students. Any suggestions?

Joe W3GW

Do You Yahoo!?

Buy the perfect holiday gifts at Yahoo! Shopping.
<http://shopping.yahoo.com>

Date: Mon, 3 Dec 2001 11:12:15 -0800
From: "Dave Benson" <nn1g@earthlink.net>
To: <somerville@uniserve.com>, <qrp-1@lehigh.edu>
Subject: [113710] Re: [Elmer 101] Pwr Supply Question
Message-ID: <001b01c17c2e\$6c791920\$a252d03f@pavilion>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

John-

It doesn't power the whole rig- just a couple circuits: the local oscillator and some low-current DC bias in the receiver.

73- Dave, K1SWL

-----Original Message-----

From: Somerville <somerville@uniserve.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Date: Monday, December 03, 2001 8:17 AM
Subject: [Elmer 101] Pwr Supply Question

According to the notes the 78L08 delivers 100 mA at 8V, $P = IV = 8V \times 0.1A = 0.8$ Watts, however the rig delivers 2-2.5 watts according to the specs. Where have I goofed?

Regards John/VE7CFG

Date: Mon, 03 Dec 2001 11:19:31 -0500
From: Bruce Muscolino <w6toy@erols.com>
To: brownh@hartford-hwp.com
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [113711] Re: [Elmer 101] component form factors
Message-ID: <3C0BA613.E2063F65@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Haines,

First you are trying too hard! I don't recall you telling us what kit you are building. Many QRP kit vendors use manufacturers overstock parts so the markings on the part do not necessarily show the exact part. You should take this up with the manufacturer. He knows what he sent you!

The manufacturer should have provided you with a sheet showing the parts so you could identify them.

NPO capacitors are NEGATIVE temperature coefficient capacitors used to trim out temperature variations that might cause drift. They will generally be marked N750 or some such thing.

A Radio Amateurs Handbook is probably the best place for you to find parts information.

73

Date: Mon, 03 Dec 2001 11:31:33 -0500
From: Bruce Muscolino <w6toy@erols.com>
To: jliving2001@yahoo.com
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [113712] Re: laptops
Message-ID: <3C0BA8E5.801A31E0@erols.com>
MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

joe,

Look carefully at the accessory inputs. Many NEW laptops do not have the legacy input connectors any longer. This makes it necessary to use a port adapter to run serial port devices like PSK31! I have a Toshiba Satellite 2805 that has this problem. It is a nice computer but requires a special adapter to run older serial port devices.

73

Date: Mon, 3 Dec 2001 11:39:06 -0500
From: "Brice D. Hornback" <bdh@cyberbound.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [113713] G-QRP's SPRAT: Special Edition #1 "Pixie File"
Message-ID: <003601c17c19\$06f487c0\$7001a8c0@lwrnc1.in.home.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello Everyone! I am pleased to announce that the G-QRP's SPRAT: Special Edition #1 "Pixie File" is now online! This is a compilation of every article and schematic related to the Pixie transceiver to ever appear within the pages of SPRAT from 1982 to present!

Download your issue today at:
<http://www.QRPp-I.com>

Special thanks to Tony, G4WIF and the G-QRP Club for making this available.

72/73! de Brice KA8MAV
QRPp International Radio Club
<http://www.QRPp-I.com>

Date: Mon, 03 Dec 2001 07:47:42 -0900
From: Jim Larsen AL7FS <AL7FS@ARRL.NET>
To: "qrp-l@lehigh.edu" <qrp-l@lehigh.edu>
Subject: [113714] Alaskans - QRP

Message-ID: <3C0BACAE.1B008BBC@ARRL.NET>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

KL7GN, Gordon Nightingale, is a long time QRPer here in Anchorage. Another active QRPer here in town is WL7CDC, Doug Stowers. We have lunch together almost every Tuesday. If you hear them, you are probably going to have a 2xQRP QSO. In fact, I think both of them are much more active than I am.

73, Jim

--

Jim Larsen, AL7FS, Anchorage, Alaska
(BP51cc) - 61.101 North, 149.824 West
mailto:al7fs@arrl.net - <http://www.qsl.net/al7fs/>

W2AGN wrote:

> Did not work John <AL70K>, but did work KL7GN with my little 1 watt in the Sprint. He
> actually answered my CQ!! Spilled my Pepsi down my shirt!
John L Sielke W2AGN

Date: Mon, 3 Dec 2001 12:15:30 -0500
From: Nils R Young <nilsbull@juno.com>
To: QRP-L@lehigh.edu
Subject: [113715] Radios in a box &c
Message-ID: <20011203.122038.760.0.nilsbull@juno.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=iso-8859-1
Content-Transfer-Encoding: 8bit

Gang,

First, almost by accident I came across a site that features a little single-board QRP transceiver clone called the Tiny-Tornado-40 or such. That got me thinkin' of way back in a now lost Ham Radio magazine edition there was an article about a tiny little 40m transceiver. It had two transistors & a couple op amps. Probably could do the same thing with a '612 and a '3866 nowadays. Nearest I can figure close was the NorCal 40-9er (or 49er, for you purists). Sure wish I still had that board I bought from MFJ all them years back.

Hmmm . . . I wonder if Far Circuits has it?

And then, just as part of your daily observation of radios you can take

anyplace but airports, check out these places:

A radio in a briefcase, in case you should ask. And 125 W at that!
<http://www.dtsi.com/7000f.html> (I dunno where these folks are, but the body shape & general description showed up in a Chinese page too.)

A company in Turkey (page in English, for you bilmiyorum folks) makes this neat little green box (150 kHz to 30 MHz) And yeah, I know it's only a receiver . . .

<http://www.aselsan.com.tr/hcing/products/Hfalmac.htm>

A complete system is shown here:

<http://www.aselsan.com.tr/hcing/products/5100.htm>

And then there's one of those "dang, that looks familiar" kinda deals at http://www.conic13c.com/jo_html/products/an-prc_130.htm and at 5/20 Watts out, it might be, even with all the teensy-tiny buttons that'd mess up a good fumble-fingers like me.

Or this one (which also looks familiar . . . I've seen so many of these tiny radios now that they're all starting to look alike)
<http://www.tadiran-com.co.il/prc-6020hf.html> (if you have a list of what all the domain names mean, I'd love to know where "ao" and "il" are.)

Och f r alle de svenskar there's this bit of history:
<http://home.planet.nl/~meuls003/gallery/ra200.html> (I'm most intrigued by who sat in the frame & peddled the generator. Like would that be a two-man contest team or not?)

Now, why should all this catch my eye after totally trashing a fiberglass antenna support? Well, it was such a depressing sight, all them pieces telescoped into the wrong places in ways that only great patience (far greater than mine, I assure you) would have been able to undo. So I decided to go back to basics: direct conversion receivers & a couple lantern batteries wired together by alligator clips & zip cord. And the antenna's a wire layin' across the roof beam of the tent.

Sometimes I have to wonder if I really am one of the last of the tool users.

But 10 m was open & I almost talked to a guy in France on MT63 (the freebanders seemed oblivious to the roaring sound). Had a couple TARA rtty Qs. Made a couple loaves of bread. Pretty decent weekend. Hope yours was too.

73

Nils

Nils R. Bull Young -- El Gringo Errante -- La Estancia de los Guajolotes
Sonrientes

W8IJN -- <http://www.geocities.com/nilsbull/w8ijn>

In my day you had to FIGHT to have digits! Every DAY was a STRUGGLE!

--- Comrade Nikolai Sergeevich McTovarishov

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Date: Mon, 3 Dec 2001 12:17:42 -0800

From: "Dave Benson" <nn1g@earthlink.net>

To: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>

Subject: [113716] Re: [Elmer 101] component form factors

Message-ID: <003f01c17c37\$90f4eaa0\$e154d03f@pavilion>

MIME-Version: 1.0

Content-Type: text/plain;
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Haines-

>>First you are trying too hard! I don't recall you telling us what kit
you are building. Many QRP kit vendors use manufacturers overstock
parts <<

With the exception of the MV1662 diode (obsoleted) , all components in
the Elmer 101 kit are procured as fresh date-code stock from ISO-900X
suppliers. You will find this to be the case with most mainstream QRP kit
vendors.

>>NPO capacitors are NEGATIVE temperature coefficient capacitors used to
trim out temperature variations that might cause drift. They will
generally be marked N750 or some such thing.<<

Wrong.

73

Date: Mon, 3 Dec 2001 12:34:46 -0500
From: W2AGN <w2agn@pobox.com>
To: qrp-1@lehigh.edu, fpqrp-1@mpna.com
Subject: [113717] 160M Sprint
Message-ID: <01120312344604.12206@njbirdman>
Content-Type: text/plain;
charset="iso-8859-1"
MIME-Version: 1.0
Content-Transfer-Encoding: 8bit

During the last hour of the Holiday Spirits Sprint, tried 1810, CQed for a while, but nothing.

Hopefully, there will be a turnout for the 160M Sprint this Wednesday evening. Load up the gutters, 40M dipoles, grandma's corset stays, whatever!

--

John L Sielke W2AGN
w2agn@pobox.com
<http://www.qsl.net/w2agn>

Date: Mon, 3 Dec 2001 12:36:51 -0500
From: "Jim Stamper" <jstamper@shentel.net>
To: <nn1g@earthlink.net>,
"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [113718] [Elmer 101] Q6 T0-220
Message-ID: <001901c17c21\$1899eb70\$e3556fcc@jim>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

In the parts I received there is a T0-220 device I assume is meant to be Q6 in the SW20+. It is marked, however, "C2166" and "11AF-c". Is this substitution OK??

jim-
KG4LDY

----- Original Message -----
From: "Dave Benson" <nn1g@earthlink.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Monday, December 03, 2001 3:17 PM
Subject: Re: [Elmer 101] component form factors

> Haines-
>
>
> >>First you are trying too hard! I don't recall you telling us what kit
> you are building. Many QRP kit vendors use manufacturers overstock
> parts <<
>
> With the exception of the MV1662 diode (obsoleted) , all components
in
> the Elmer 101 kit are procured as fresh date-code stock from ISO-900X
> suppliers. You will find this to be the case with most mainstream QRP kit
> vendors.
>
>
> >>NPO capacitors are NEGATIVE temperature coefficient capacitors used to
> trim out temperature variations that might cause drift. They will
> generally be marked N750 or some such thing.<<
>
> Wrong.
>
> 73
>
>

Date: Mon, 3 Dec 2001 12:45:00 EST
From: Jfelts202@aol.com
To: qrp-1@lehigh.edu
Subject: [113719] Tuna tin 2
Message-ID: <162.4fa3293.293d141c@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

I'm probably a dollar short and a day late as usual but I'm wondering if
anybody has a kit for the Tuna Tin 2?

Jerry - NR5A - South Dakota

Date: Tue, 04 Dec 2001 01:48:51 +0800
From: "Jerry Bartachek" <leadsheet@musician.org>
To: qrp-1@Lehigh.EDU

Subject: [113720] Reduced Price! FS: PK-232MBX W / UPGRADE
Message-ID: <20011203174857.57905.qmail@mail.com>
Content-Type: text/plain; charset="iso-8859-1"
Content-Disposition: inline
Content-Transfer-Encoding: 7bit
MIME-Version: 1.0

AEA PK-232 in Mint conditon with Timewave upgrade version 7.133 installed which adds PActor, Gateway, MBX, GPS. Includes 2 rig connection cables, an FSK connection cable with DIN plug mated to the PK-232, and a serial computer cable with a DB25 connector on each end.

Asking \$140, shipping included - Or Best Offer.

Jerry KD0CA
E-Mail: leadsheet@musician.org

--

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QRP ARCI #5166
QRP-L #544

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http://www.getpennytalk.com/cgi-bin/adforward.cgi?p_key=RG9853KJ&url=http://www.getpennytalk.com

Date: Mon, 03 Dec 2001 12:58:45 -0500
From: David Hinerman <WD8CIV@worldnet.att.net>
To: qrp-l@lehigh.edu
Subject: [113721] Re: Radios in a box &c
Message-ID: <5.1.0.14.1.20011203125601.00a602f0@ipostoffice.worldnet.att.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 12:15 PM 12/3/2001 -0500, you wrote:
>Or this one (which also looks familiar . . . I've seen so many of these

>tiny radios now that they're all starting to look alike)
><http://www.tadiran-com.co.il/prc-6020hf.html> (if you have a list of what
>all the domain names mean, I'd love to know where "ao" and "il" are.)

Nils,

According to the list at <http://siteware.ch/webresources/domains/national/>
".il" is Israel and ".ao" is Angola.

Maybe somebody needs to create a callsign prefix <-> national top-level
domain cross reference? (Grin)

Dave

Dave Hinerman
WD8CIV@worldnet.att.net

Date: Mon, 3 Dec 2001 13:36:39 -0500
From: "Hare,Ed, W1RFI" <w1rfi@arrl.org>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [113722] RE: OT Re: fund raising
Message-ID: <125490A005E3D3118C9C00805FC743CC03390E5E@KAHLESS>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

> The NRA uses its direct mail advertising to support its life. The
> League use it to support a few extra ideals. There is a difference.
> However, if I knew this would occur when I bought my Life
> Memberships, I
> would never have bought either! Id I think what is going on is worthy
> of support I will support it. Otherwise the mail hits the round file
> shortly after it is delivered. This applies to both the
> League and the
> NRA!

Are you really telling us that if you knew that the ARRL was going to try to
raise money to support things to benefit Amateur Radio, you would not have
become a life member? This is all not making sense to me, Bruce. On one
hand, you say quite correctly that you can either support the effort that an
organization is soliciting funds for, or not, but on the other hand you are
saying that you would not have supported that organization had you known
they were going to ask. That seems a bit contradictory to me, Bruce.

Let me cut to the chase -- the solicitations I have seen are asking for funds to support the League's efforts to address the many threats to Amateur Radio Spectrum, and for things like its ongoing work seeking 300 kHz of exclusive spectrum on 7 MHz and an additional domestic allocation on or near 5 MHz. (See <http://www.arrl.org/news/bandthreat>). When you got that soliciation, you clearly didn't think it worthy of support -- enough so that you told everyone here that you feel you shouldn't have become a Life Member of ARRL because the League even asked you. Why do you feel that ARRL's work in that area merited the circular file?

73,
Ed Hare, W1RFI
ARRL Lab
225 Main St
Newington, CT 06111
Tel: 860-594-0318
Internet: w1rfi@arrl.org
Web: <http://www.arrl.org/tis>

> -----Original Message-----

> From: Bruce Muscolino [<mailto:w6toy@erols.com>]

> Sent: Friday, November 30, 2001 6:22 AM

> To: Hare,Ed, W1RFI

> Cc: Low Power Amateur Radio Discussion

> Subject: Re: OT Re: fund raising

>

>

> Well ED, it's like this. I joined the League because it was the

> preeminent organization in ham radio. QST used to come to my

> door every

> day filled with articles of interest. Lately, that is not true. The

> number of construction articles has diminished. The number

> of operating

> articles has dropped off. What we are left with is a magazine filled

> with organizational news.

>

> I'm, sorry, I bought a Life Membership in the NRA long before I could

> afford one in the ARRL. I have seen the same thing in their

> magazine.

> Fewer and fewer articles about funs and more about activities that i

> will almost never be able to attend. More organizational news!

>

> Then along comes the direct mail pieces. Now the NRA is in

> trouble, at

> least in some views. Guns are not popular among the citizenry. They

> claim to need extra money to support their fight against the anti gun
> forces. I ask you, does ham radio face such a challenge? Are our
> privileges in danger of being revoked. Will thousands of
> dollars of our
> equipment suddenly become illegal? Will it loose its value? I don't
> think so.
>
> The NRA uses its direct mail advertising to support its life. The
> League use it to support a few extra ideals. There is a difference.
> However, if I knew this would occur when I bought my Life
> Memberships, I
> would never have bought either! Id I think what is going on is worthy
> of support I will support it. Otherwise the mail hits the round file
> shortly after it is delivered. This applies to both the
> League and the
> NRA!
>
> 73
>

Date: Mon, 03 Dec 2001 18:48:10 +0000
From: "Delbert Long" <ad6we@hotmail.com>
To: qrp-l@Lehigh.EDU
Subject: [113723] battery charger
Message-ID: <F242tMVhEUsebmspH2q00018e81@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

I have a RYOBI cordless drill...the battery charger went south...anybody
know where I can get directions how to kluge together a charger for this
thing? Or a website that might have a plan... (12 Volt NiCad)

Delbert Long, AD6WE

Everything should be made as simple as possible, but not simpler. - Albert
Einstein

Get your FREE download of MSN Explorer at <http://explorer.msn.com/intl.asp>

Date: Mon, 3 Dec 2001 13:50:04 -0500
From: "Brice D. Hornback" <bdh@cyberbound.net>

To: <nilsbull@juno.com>,
"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [113724] Re: Radios in a box &c
Message-ID: <00d101c17c2b\$52932ee0\$7001a8c0@lwrnc1.in.home.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Nils,

> First, almost by accident I came across a site that features a little
> single-board QRP transceiver clone called the Tiny-Tornado-40 or such.
> That got me thinkin' of way back in a now lost Ham Radio magazine edition
> there was an article about a tiny little 40m transceiver. It had two
> transistors & a couple op amps. Probably could do the same thing with a
> '612 and a '3866 nowadays. Nearest I can figure close was the NorCal
> 40-9er (or 49er, for you purists). Sure wish I still had that board I
> bought from MFJ all them years back.

The original design of the Tiny-Tornado transceiver is based on dates back to the Micro-80 designed by my friend Oleg Borodin - RV3GM in 1987. In 1995, the Pixie was designed based on the Micro-80. Since then, several people have improved the design and performed many modifications. The Pixie 2 is still sold in kit form today by HSC. However, I was rather disappointed by that kit. So... the Tiny-Tornado was born. The Tiny-Tornado is an extension of that earlier work. It is a "better and improved" Pixie. It's unfair to call the Tiny-Tornado a clone. That's not true. It is an improved version of a proven design and probably the best absolute minimalist micro-transceiver kit ever made. It's certainly the BEST Pixie type rig ever made. I'm not just saying that because I designed it... but because I've tried it side-by-side and to be honest... there simply isn't any comparison.

If you've never tried a true minimalist D-C transceiver you don't know what fun you're missing out on.

Would anyone here who currently has a Tiny-Tornado like to comment?

72/73 DE KA8MAV (Brice)
Indianapolis, IN EM79au
QRPP-I #1, QRP ARCI #10972, QRP-L #2360, ARRL
KLQRP, FPQRP -156, ARS #1,138, NETXQRP #27
AOL Instant Messenger ID: ka8mav

QRPP International Radio Club
Tiny-Tornado Transceiver Kits
<http://www.QRPP-I.com>

Date: Mon, 03 Dec 2001 14:02:38 -0500
From: Mike Maiorana <mikemo@attglobal.net>
To: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>
Subject: [113725] [Elmer 101] Components
Message-ID: <3C0BCC4E.83A91707@attglobal.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Let me clear up some confusion. This is a bit "off topic" for the Elmer 101 class, but I'm writing this to help clear the air. Please don't bother responding to this as I don't need this to become another thread.

There are two, sometimes diametrically opposed sides of a design. One is the design side itself, and the other is the manufacturing / business side. When a hobbyist designs a radio, it is for himself only, but to mass produce that radio would require a lot more "engineering". Consider component availability and allocation, component tolerance across lots, supplier delays, volumes, forecasting, physical size... You get the picture.

So, looking at the design of the SW series radios, the designer / manufacturer needs to make decisions. The "art" of manufacturing engineering is to make decisions that reduce cost, increase profit, increase reliability and simplify manufacturing, all without affecting the function of the device. This is not a simple task.

Let's take an example. Consider a simple bypass capacitor. Any one of a thousand different components would work properly, but the trick is to find the part that functions correctly, fits on the board, and keeps the cost down. If you use 25 .01 microfarad capacitors in your design already, you may choose to use that value as you probably get a good price considering the volume you buy. Does it matter that a .001 microfarad capacitor would have worked properly? No. The circuit functions either way, and you just reduced your cost (and increased profit). So, we may have a difficult time understanding exactly "why" certain components are a certain value. There are many factors in that decision.

Another bane of the manufacturing engineer is availability. What if you design an entire product around a component that is manufactured only by one company. What if that company decides, for economic reasons, to stop making that part (this happens all the time)? You are in trouble.

Manufacturers try to find as many sources as possible for each component. It allows them to find the best price (competition) and also allows for availability if one of the manufacturers stops making your part. Also, you would look for other parts that would work in the design (like the Q6 power transistor). Multiple parts gives you more purchasing options. Even with these safeguards, components often reach their "end of life" in manufacturing, even though they are still used in some designs. This is when you stock up on as many as you can handle, then start the redesign...

For a "home brew" radio, you can use any parts you wish, salvaged or new. Most manufacturers can't do this. I know that Small Wonder Labs only uses new parts from real suppliers to fill their kits. (This is obvious to anyone who has ever purchased a kit from them). I imagine that most of the mainstream kit manufacturers also do.

Regards,
Mike Maiorana, KU4QO

Date: Mon, 03 Dec 2001 10:54:55 -0500
From: Somerville <somerville@uniserve.com>
To: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [113726] [Elmer 101] IC Identification & Antistatic Handling
Message-ID: <3C0BA04F.C39E88CF@uniserve.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

A bit late I know but I didn't positively identify Q6 other than by the T0-220 outline: the designation on the device is C2166 is that correct?

Also I'm a bit paranoid about handling items in an antistatic bag, my usual procedure that has worked so far is to ground myself via the microphone ground on my little used QRO rig and to place the IC on a conductive surface. I have also thought that working on a metal table would work provided that I place my bare arms on the table before handling. Is my thinking correct?

Regards John/VE7CFG

Date: Mon, 03 Dec 2001 14:19:11 -0500
From: Alex <kr1st@amsat.org>

To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [113727] Re: OT Re: fund raising
Message-ID: <3C0BD02F.AE1B2E10@amsat.org>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7bit

"Hare,Ed, W1RFI" wrote:

> Why do you feel that ARRL's work
> in that area merited the circular file?

Well, perhaps for the same reason questions asked by their members are dropped in the same circular file. Maybe if I ask for the third time I would get an answer to my question:

Does the ARRL sell, rent, trade or share information about which members contribute
"over and above" their membership dues to other organizations?

Thank you,
--Alex

Date: Mon, 3 Dec 2001 14:21:36 -0500
From: "Mike Yetsko" <myetsko@insydesw.com>
To: <somerville@uniserve.com>,
"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [113728] Re: [Elmer 101] IC Identification & Antistatic Handling
Message-ID: <005101c17c2f\$bd38adc0\$6501a8c0@INSYDENT>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

One thing to remember about grounding and static sensitive parts...

It's like speed. The DIFFERENCE is what kills.

It doesn't help to ground yourself and then lay the parts on a metal plate on your workbench that happens to have a static charge on it.

To do this PROPERLY, the work surface should be 'grounded' and so should you. The bag or container with the parts should be placed on the surface for a few seconds, and THEN the part taken out. That way any residual charges are equalized.

How do you ground a workbench? There are a number of ways.
But the BIGGEST NO NO in doing so is to tie a wire from the bench
to a wall socket for ground!! What happens if YOU are tied to the
bench and discover a leaking power supply? OOPS!!!

When you tie to ground, if you don't use a commercial product, use
something like a 1Meg resistor. If you use 'body straps', I'd really
insist on a commercial product.

In a practical sense, I NEVER ground myself, but the work surfaces
of my area is always at static 0! I've not lost a part yet that I know
of
to static. And I've been doing this for years. Common sense and
always 'touching frames' or setting conductive blocks down before
you handle to remove and plug is more than enough. The brute
force approach to me seems to geared towards the people who
just don't understand it and need to be compensated for.

So, as to your question, yes. Working on a metal surface and
just touching it is probably more than necessary. As long as you
ALSO make sure the parts are 'equalized' to the surface, and
not just 'pulled out' and plopped down.

Personally, I really don't like metal surfaces. I DO really like the
soft rubber mats that are high resistance. These even come with
a 'snap' for connecting to a ground system. They're just plain
pleasant to work on. I could just imagine working on a board like
my K2 over a sheet metal surface. The thought makes me cringe
like someone just ran their fingernails on a blackboard.

Mike

----- Original Message -----

From: "Somerville" <somerville@uniserve.com>

> Also I'm a bit paranoid about handling items in an antistatic bag, my
> usual procedure that has worked so far is to ground myself via the
> microphone ground on my little used QRO rig and to place the IC on a
> conductive surface. I have also thought that working on a metal
table
> would work provided that I place my bare arms on the table before
> handling. Is my thinking correct?
>
> Regards John/VE7CFG

Date: Mon, 3 Dec 2001 11:50:53 -0800
From: "John Moriarity" <k6qq@hdo.net>
To: <w6toy@erols.com>,
"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [113729] Re: [Elmer 101] NPO
Message-ID: <009401c17c33\$d187d180\$c85fa13f@k6qq>

> NPO is used to indicate the temperature coefficient of a capacitor.
NPO
> capacitors change capacity NEGATIVELY with respect to rising
> temperature. Regular capacitors have a POSITIVE temperature
> coefficient...

Sorry Bruce, not true. NPzero capacitors are (as nearly
as possible) *zero* temperature coefficient.

Capacitors with specified temperature coefficients used
to be readily available, but not anymore. I have in my stash
capacitors with TCs like "P100" and "N750", for example.
These examples are for a positive TC of 100 parts-per-million,
and a negative TC of 750 parts-per-million.

Now we mostly use zero-TC caps, and hope for the best!

73,

John, K6QQ

Date: Mon, 3 Dec 2001 11:56:49 -0800 (PST)
From: Bob Patten <n4bp@yahoo.com>
To: AL7FS@ARRL.NET,
"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [113730] Re: Alaskans - QRP
Message-ID: <20011203195649.54371.qmail@web14310.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

--- Jim Larsen AL7FS <AL7FS@ARRL.NET> wrote:
> KL7GN, Gordon Nightingale, is a long time QRPer here in
> Anchorage.
> Another active QRPer here in town is WL7CDC, Doug
> Stowers. We have

> lunch together almost every Tuesday. If you hear them,
> you are probably going to have a 2xQRP QSO.
>

Yep, they both appear to be very active. In the Homebrew Sprint yesterday, I worked KL7GN on 10 & 20 Meters, and WL7CDC on 10 & 15. Four AK QSO's in a QRP sprint - sure is a record for me. But no AL7FS. :-(

=====

73, Bob Patten, N4BP Plantation, FL

E-Mail: n4bp@yahoo.com Website: <http://www.qsl.net/n4bp>
QRP ARCI #3412 FISTS #7871 ARS #799 SOC #1 Whiners #6

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Buy the perfect holiday gifts at Yahoo! Shopping.
<http://shopping.yahoo.com>

Date: Mon, 3 Dec 2001 14:55:34 -0500
From: "Hare,Ed, W1RFI" <w1rfi@arrl.org>
To: Low Power Amateur Radio Discussion <grp-l@Lehigh.EDU>
Subject: [113731] RE: OT Re: fund raising
Message-ID: <125490A005E3D3118C9C00805FC743CC03390E6D@KAHLESS>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

As I said earlier, Alex, Dennis Bodson, your Division Director, can answer that question. As I recall, you had asked him that question last week in email. If he is away on a trip or some other such, that could explain the delay in getting an answer. I have not received an answer from him on several open items, and he is usually reasonably fast with his emails. Perhaps you could call him at home -- his number is 703-243-3743.

But I am not sure that the comparison is really apples and apples. Are you really saying that you feel a week's delay in answering that question is on a par with the importance of ARRL's spectrum protection efforts?

73,
Ed Hare, W1RFI
ARRL Lab
225 Main St
Newington, CT 06111
Tel: 860-594-0318
Internet: w1rfi@arrl.org

Web: <http://www.arrl.org/tis>

> -----Original Message-----

> From: Alex [mailto:kr1st@amsat.org]

> Sent: Monday, December 03, 2001 2:19 PM

> To: Low Power Amateur Radio Discussion

> Subject: Re: OT Re: fund raising

>

>

> "Hare,Ed, W1RFI" wrote:

>

> > Why do you feel that ARRL's work

> > in that area merited the circular file?

>

> Well, perhaps for the same reason questions asked by their members are

> dropped in the same circular file. Maybe if I ask for the third time I

> would get an answer to my question:

>

> Does the ARRL sell, rent, trade or share information about

> which members

> contribute

> "over and above" their membership dues to other organizations?

>

> Thank you,

> --Alex

>

Date: Mon, 03 Dec 2001 15:22:23 -0500

From: Donn Kuse <casey.jay@gte.net>

To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>

Subject: [113732] [Elmer 101] electrolytic capacitor

Message-ID: <3C0BDEFF.AE81C94@gte.net>

MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Question:

Which side is positive and which side is negative? There's a short lead and a long lead. The short side is on the side with the black band on the side. Is this negative? Never worked with these before. Tnx.

73, Donn, WB4ZWT

66 and still learning

Date: Mon, 3 Dec 2001 12:32:28 -0800
From: "J. Edward \ (Ed\) Muns" <w0yk@msn.com>
To: <qrp-1@lehigh.edu>
Subject: [113733] Report on K2s in the CQWW
Message-ID: <EEEDJHFMDIEMEDAKKD00EEGKGAAA.w0yk@msn.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

The Performance of the Elecraft K2 Transceivers used in the 2001 CQWW CW
Contest
November 30, 2001
by KE7X, K2KM, W0YK, N6XG, N6BT

Summary:

- * The K2 has sufficient "depth" to be able to present signals that can be acquired in large pileups..
- * The K2 receiver audio sounded somewhat "tinny" to some ears.
- * Three transceivers exhibited a frequency change (unknown if only receive or both transmit and receive) when the rig was keyed. This was fixed by cycling the power.
- * One transceiver exhibited some receive frequency instability that was fixed by cycling the power.
- * There may be some slight transmit frequency stability problems.
- * The serial I/O interface managed to get CT confused at times.
- * The RIT control is not the greatest for contest operation and most operators used split to be able to move around in the pileup.
- *** The K2, with the 100 PA, will be a great DXpedition/contest radio. ***

Analysis:

Six K2s were used on 160 - 10 meters resulting 8040 QSOs, 124 zones and 400 countries during the contest. While we haven't totaled the non-contest QSOs, we suspect we made at least another 4000 QSOs before the contest. Our main concerns were what the receiver would sound like under the stress of the big pileups we were expecting and if the K2 would stand up to the greater than 50% transmitting duty cycle to which it would be exposed during the contest.

Receiver Pileup Performance:

The answer to the first concern is that the K2 receiver has plenty of "depth" that allows the pileup signals to be distinguished from one another. The 10M and 15M operators ran the K2 with a 1 kHz or 700 or 800 Hz filter bandwidth. It turns out, perversely it seems to the casual operator, that a wider bandwidth is preferable to a narrower bandwidth when on the DX end of a pileup. When many signals are there we need to be able to sort out

signals based on their tone (and other audio clues) in addition to their signal strength. The K2s performed very well in this respect although we wished we could have had one of the other radios that we know perform well under these conditions such as the TS930 or IC765 to do an A-B comparison. As a reference, K2KW's peak clock hour on CW was 175 QSOs. During that hour, the peak "last 10" QSO meter was above 300/hr. Only a few times were there too many signals to easily sort out. During those times, K2KW cranked down the RF gain to about 50%, and then the pileup depth returned, and he easily ran stations. Even on some high-end radios, this technique does not help on the DX end of a pileup.

A criticism of the audio sound was that it sounded somewhat "tinny" and one operator observed the sound was more full when plugging the Heil Pro headset into the external speaker jack in the back. This effect maybe due to the 82 ohm resistors in the front panel headphone jack circuit that are not in the circuit for the external speaker. Another operator would like to have more audio level as he had the AF gain cranked wide open most of the time.

Most of the operators agreed that the sidetone mod to make a sinusoid sidetone should be done.

K2 High Duty Cycle Performance:

The K2s withstood the duty cycle over the whole contest with only a few problems. One op had a (specific) computer problem that would put a key-down when booting up CT, and one time a K2 was likely key-down for 2 hours at the 5W level. The rig was only slightly warm. The KE7X K2 heat sink was monitored through the contest and although it was warm it never seemed dangerously hot while running 5 W at all times.

Three transceivers exhibited a problem when keying, either from CT or from the paddle input. The transceiver would jump down 100 Hz (or so) each time it was keyed. We are not sure if both transmit and receiver frequencies were changing (KE7X and W0YK were running split most of the time) or just the receiver. It happened on KE7X's radio several times and the cure was to cycle the power and then it would play OK.

The KE7X K2, at least once, maybe twice, had a frequency stability problem on receive. The received signals sounded wobbly, kinda like my old Swan 350. The fix was to cycle the power and then it was OK.

We've had a couple of reports that our signal, especially on 10m, had a slight but noticeable warble to it. He said it wasn't really bad, but with his discerning ears, it was noticeable. One possibility is that running the 4 K2s on one PS may at times overtax it? (The supply was an Icom PS30 30 amp switching power supply weighing 4 lbs. It, too, got warm but not hot.)

The computer control with the serial I/O module had some problems. At times CT would get confused and not display the correct frequency in the band map. The rig might be on 80m, but CT was on 40m. Sometimes when you changed the rig, CT would cycle along with the change, keeping the 1 band discrepancy. A couple of times CT gave the error message "Com port overrun" indicating it wasn't keeping up with what the K2 was sending. To fix and resynch the two ports, the radio was switched off and then back on and CT was reloaded. In order for the radio and CT to talk in the first place, the radio has to be on when CT is executed. We were using the TS940 CT radio interface.

General Comments:

A general ergonomic complaint was that the RIT wasn't easy to use to move around in the pileup when acquiring a signal. The RIT range of 1 kHz was a good tuning rate, but the range was too small for working most CW split pileups that were often "up 1". The 2.4 kHz range was good for your typical split pileup, but then the tuning was too quick, often overshooting the person you were trying to tune in. An RIT range of around 1.5 kHz seems like a good balance. (Can this be programmed?) Most of us operated split and used the main tuning knob which worked better. In this mode, there should be a TX frequency lock feature, which we understand is coming out in new firmware. One operator suggested that the RIT and XIT indicator on the display should be solid, not flashing. Flashing seems to suggest some emergency situation.

We are thinking about a mod to remote the RIT control to put it in a box that would be offer easier access to RIT, and have a pot with greater range and smoother to control than the existing POT.

On the plus side, there was no station interference to speak of when all 5 rigs were operational at once. There were no phase noise problems detected. Second harmonics were very low, and usually at the ESP level, although there was an instance where the 20 M station was heard at a low level by the 40 M station.

Our conclusion is that the K2, with the 100 W amplifier, will be an excellent DXpedition and contest-expedition radio. We are a little concerned about the observed frequency changing and some more testing is needed. The computer control needs to be solidified to be confident of multiband contest operation.

Fred Cady
Department of Electrical and Computer Engineering
Montana State University
Bozeman, MT 59717

fcady@ece.montana.edu
http://www.coe.montana.edu/ee/cady/cadyhmpg.htm
(406) 994-5976

Date: Mon, 03 Dec 2001 21:32:05 +0100
From: DK3RED@t-online.de (Ingo, DK3RED)
To: QRP-L <qrp-l@lehigh.edu>
Subject: [113734] Re: [Elmer 101] electrolytic capacitor
Message-ID: <3C0BE145.CE782C70@t-online.de>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hello Donn,

> Which side is positive and which side is negative? There's a short lead
> and a long lead. The short side is on the side with the black band on
> the side. Is this negative? Never worked with these before. Tnx.

The short lead is most (not ever) the positiv side. Better look at the
"head" of the capacitor. Is the black band a "minus" or is on the band or
the head an other symbol (like "+" or "-")?

--
72/73 de Ingo, DK3RED (Don't forget: the fun is the power !)
dk3red@t-online.de - www.qsl.net/dk3red - www.t-online.de/~dk3red

Date: Mon, 3 Dec 2001 12:34:34 -0800
From: "John Moriarity" <k6qq@hdo.net>
To: <k6qq@hdo.net>,
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [113735] Re: [Elmer 101] NPO; Correction
Message-ID: <00ba01c17c39\$ec529620\$c85fa13f@k6qq>

> Now we mostly use zero-TC caps, and hope for the best!

I should have said "Now we mostly use zero-TC caps in
our oscillators..."

72,

John, K6QQ

Date: Mon, 03 Dec 2001 15:57:24 -0500
From: Alex <kr1st@amsat.org>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [113736] Re: OT Re: fund raising
Message-ID: <3C0BE734.3A3C3AB4@amsat.org>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7bit

"Hare,Ed, W1RFI" wrote:

> But I am not sure that the comparison is really apples and apples. Are you
> really saying that you feel a week's delay in answering that question is on
> a par with the importance of ARRL's spectrum protection efforts?

I'm not comparing those two issues. You are, so you could probably
answer that question better than I can.

I was merely saying that the reason for directing something to the
"circular file" may be the same (perceived importance/priority), even
though the issues are different.

Anyway, you are indicating that I still may receive an answer, so I am
hopeful.

73s,
--Alex

Date: Mon, 03 Dec 2001 15:53:37 -0500
From: Donn Kuse <casey.jay@gte.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [113737] [Elmer 101] Elec. cap
Message-ID: <3C0BE651.8F768178@gte.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Thanks to all for the reply. I hope I got it right. On these in the
SW20 kit, there is a "-" sign outlined with a blue square, so I take it

this is the negative side.
73, Donn, WB4ZWT
66 and still learning

Date: Mon, 3 Dec 2001 16:04:17 -0500
From: "Hare,Ed, W1RFI" <w1rfi@arrl.org>
To: "'kr1st@amsat.org'" <kr1st@amsat.org>,
Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [113738] RE: OT Re: fund raising
Message-ID: <125490A005E3D3118C9C00805FC743CC03390E7C@KAHLESS>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Hi, Alex,

It seemed important that you receive an answer quickly, so I forwarded the exchange to the ARRL's Chief Financial Officer, Barry Shelley. He replied:

> I'm not comparing those two issues. You are, so you could probably
> answer that question better than I can.

Well, you did raise the 2nd issue in response to my question about the 1st. I suppose that technically that is not a comparison.

I think this has crossed the line into being way off topic, so if you would like to continue it, I will gladly join you on rec.radio.amateur.policy.

73, Ed Hare, W1RFI

-----Original Message-----
From: Shelley, Barry, N1VXY
Sent: Monday, December 03, 2001 3:23 PM
To: Hare,Ed, W1RFI; Bodson, Dennis (Dir, Roanoke)
Cc: Hobart, Mary
Subject: RE: OT Re: fund raising

We do not sell this information or make it public in any way.

Barry

73,
Ed Hare, W1RFI
ARRL Lab

225 Main St
Newington, CT 06111
Tel: 860-594-0318
Internet: w1rfi@arrl.org
Web: <http://www.arrl.org/tis>

> -----Original Message-----
> From: Alex [mailto:kr1st@amsat.org]
> Sent: Monday, December 03, 2001 3:57 PM
> To: Low Power Amateur Radio Discussion
> Subject: Re: OT Re: fund raising
>
>
> "Hare,Ed, W1RFI" wrote:
>
> > But I am not sure that the comparison is really apples and
> apples. Are you
> > really saying that you feel a week's delay in answering
> that question is on
> > a par with the importance of ARRL's spectrum protection efforts?
>
> I'm not comparing those two issues. You are, so you could probably
> answer that question better than I can.
>
> I was merely saying that the reason for directing something to the
> "circular file" may be the same (perceived importance/priority), even
> though the issues are different.
>
> Anyway, you are indicating that I still may receive an answer, so I am
> hopeful.
>
> 73s,
> --Alex
>

Date: Mon, 03 Dec 2001 16:42:09 -0500
From: Bruce Muscolino <w6toy@erols.com>
To: w1rfi@arrl.org
Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>
Subject: [113739] Re: OT Re: fund raising
Message-ID: <3C0BF1B1.C5DBC610@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Well Edward,

You are not going to change my mind. Just today I received a letter from Mary Hobart, your new Chief Development Officer asking me for a "generous" contribution to be used for the defense of amateur radio. DEFENSE OF AMATEUR RADIO? What does she know about threats to amateur radio, she is not even a ham! Where did she get her training, the NRA?

If amateur radio is in that much danger we don't have a hope! There is no legal threat to ham radio as we know it. Sure, there are some threats to our ham bands, these have been fought at the WARC's, with the League giving in whenever something became an issue.

I don't like the thought that you can now milk the membership, especially the Life Membership for money. Not all of us are independently wealthy. I think the idea of a vague specter of a "THREAT" needs some work. Let her and the League do their homework and present us with a reasonable idea of what we are gearing up for.

Meanwhile, it costs me nothing to fill the round file!

73

Date: Mon, 3 Dec 2001 15:56:53 -0600
From: "Brockwell, Stephen E. CECOM SEC FSSE ILEX" <brockwse@fssec.army.mil>
To: "'qrp-1@lehigh.edu'" <qrp-1@lehigh.edu>
Subject: [113740] KL7Y in NOV SS qsl info ?
Message-ID: <D9781901107D6A4AB59B567ED74090B454D9BC@pandora.fssec.army.mil>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"

Cannot get to any good sites right now but I wanted to qsl the KL7Y station that I worked qrp to qrp in the November SSB sweepstakes and need to know where to qsl. I can't remember if the operator was WA2GO or something close to that.

I was EXCITED to put it mildly when I heard him call "KL7Y/QRP" very clearly but kindof faint and then REALLY EXCITED when I answered him with an FT-817 at 5 watts and we exchanged the data. A very memorable contact -- very short -- but very neat.

TIA
Steve KC5TTY

Date: Mon, 03 Dec 2001 13:54:35 -0800
From: "Arthur G. Silvers" <ags@ieee.org>
To: g4wif@btinternet.com
Cc: qrp-1 <qrp-1@Lehigh.EDU>
Subject: [113741] Metered SWR Bridge
Message-ID: <3C0BF49B.A1966CEE@ieee.org>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Tony,

I would very much like to express my appreciation for the help your SWR bridge article in QRPP provided in my quest for a desk friendly z-match SWR bridge combo. Sure an LED bridge works well but the tuning is sometimes so critical that its very difficult to find the nulls especially in daylight when using say an end-fed halfwave. The nulls on a meter are easier to spot. Also, every time I am operating from my desk and want to tune the antenna, I need to stand up to look straight into the LED. So lately, I've been using the meter in my antenna analyzer to tune the antenna instead of the LED in the bridge of my current z-match.

Please don't misunderstand. The LED bridge is a TERRIFIC, low cost, highly recommended, trail friendly SWR indicator and will remain my primary field and portable antenna tuner indicator. But, my wish was to cobble together a z-match in a nice desktop friendly enclosure with a meter readout and give my antenna analyzer a break. Your article was just the ticket. I had most parts and a 0-100 microammeter that I picked up long ago at a Norcal meeting for 1 USD that I wanted to use for something. The only mods needed were the potentiometer and bridge resistor values to scale down the current across the bridge to the meter since your design called for a 0-1 millammeter.

More significantly, you provided a tested solution for a simple metered SWR bridge and I am truly grateful.

72/73,
Arth W6AGS

Date: Mon, 3 Dec 2001 17:16:01 -0500
From: "Steve Lawrence" <Steve.Lawrence@ITWFEG.COM>
To: qrp-1@Lehigh.EDU
Cc: ptay1253@yahoo.com
Subject: [113742] Re: LED Tuning
Message-ID: <0F0C2A243E.FEC91B7A-0N85256B17.007A0252@pmi.net>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I picked up this tidbit from the Elecraft reflector regarding a simple zero-beat visual tuning indicator. You might check this out!

KR5L's CW Visual Zero Beat Detector...
http://home.earthlink.net/~n0ss/kr5l_cw_tuning_ind.pdf

73,
Steve
aa8af

Date: Mon, 03 Dec 2001 13:22:28 -0900
From: Jim Larsen AL7FS <AL7FS@ARRL.NET>
To: brockwse@fssec.army.mil
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [113743] Re: KL7Y in NOV SS qsl info ?
Message-ID: <3C0BFB24.A9F2FBCC@ARRL.NET>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I have sent off a message to John and Dan to get the QSL info for you.
I think Dan uses a QSL manager...QRX.

Jim

--

Jim Larsen, AL7FS, Anchorage, Alaska
(BP51cc) - 61.101 North, 149.824 West
<mailto:al7fs@arrl.net> - <http://www.qsl.net/al7fs/>

"Brockwell, Stephen E. CECOM SEC FSSE ILEX" wrote:

>
> Cannot get to any good sites right now but I wanted to qsl the KL7Y station
> that I worked qrp to qrp in the November SSB sweepstakes and need to know
> where to qsl.

Date: Mon, 3 Dec 2001 17:19:18 -0500
From: "Steve Lawrence" <Steve.Lawrence@ITWFEG.COM>
To: mmfancher@earthlink.net
Cc: qrp-l@lehigh.edu
Subject: [113744] Re: Keyer Technique
Message-ID: <OF392FA100.48700DE2-ON85256B17.007A73A1@pmi.net>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Mark,
Check out:

<http://www.qsl.net/k7qo/sending.html>

73,
Steve
aa8af

Date: Mon, 3 Dec 2001 16:01:04 -0700 (MST)
From: "Karl F. Larsen" <k5di@zianet.com>
To: <qrp-l@lehigh.edu>
Subject: [113745] ARRL and Band Threat
Message-ID: <Pine.LNX.4.33.0112031548490.1310-100000@cannac.fun>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I think the main thing to keep in mind is not that there is a threat to our Ham bands, but rather what can we do about it? The ARRL wants you to send money so they can buy lawyers with it. These guys will draft papers to the FCC. The Big-Money people HAVE a full floor of lawyers working towards getting the frequencies for their company. Willing to pay FCC millions to use them.

Now what did the ARRL do when the broadcast stations started to get on the 40 meter band? Nothing. They tried but it was millions against peanuts. And that is international. But here at home the Voice of America is on 7.290 MHz. Can ARRL do anything about that? No.

I contribute nothing more than by dues to this doomed effort. It may come that ARRL will not be, in the main serving we Hams any more. Then I will stop paying dues.

--

Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -
<http://www.zianet.com/k5di/>

Date: Mon, 3 Dec 2001 18:01:03 -0500
From: "Mark Fancher" <mmfancher@earthlink.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [113746] Field Day Special
Message-ID: <001a01c17c4e\$633e38c0\$dd609a40@ae.ge.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="Windows-1252"
Content-Transfer-Encoding: 7bit

All:

I've been having quite a learning experience trying to model the W7EL's Field Day Special. It was originally described in the June '84 QST, and once again at Roy's presentation at the '98 PACIFICON. Its basically an enhanced ZL special.

Neat concept. Relatively high gain without the large boom length.

Roy has a free DOS program that you can use to design your own. You can download it at:

<http://www.eznec.com/miscpage.htm>

I recently designed one for 10m, modeled in EZNEC and built it using about \$10 in materials from Home Depot. It was actually quite spooky, but the impedance measurements I made with my MFJ 259 matched very closely with the program's prediction. Roy includes a file called 20m_home with the download. I simply rescaled it to my favorite portion of the 10m band.

If you don't have space for a beam, and would like a directional antenna with very little investment, I highly recommend this! For backpacking purposes, one could easily "steer" the thing using the Armstrong method.

Please let me know if you have any experience with this.

Mark, AA4MF

Date: Mon, 03 Dec 2001 18:25:13 -0500
From: David Hinerman <wd8civ@worldnet.att.net>
To: qrp-1@lehigh.edu
Subject: [113747] Re: Eagle CAD software
Message-ID: <3.0.6.32.20011203182513.0079bce0@postoffice.worldnet.att.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 04:08 PM 12/3/01 -0700, you wrote:

>It does the same freeze job on me at work, with NT. On some of the
>computers with 512M it doesn't seem to happen. The culprit appears to
>be the auto save function. If I turn it off and save early and often,
>the problem goes away. When my machine at work locks up I'm stuck for 10
>to 15 minutes until the network logs me off and then I can relog in and
>get back to work. a real pain and the tech support sucks.

Brian,

Eagle autosaves? I really ought to read the manual. I've gotten in the habit of saving frequently anyway, so I think I could turn it off.

My sympathy on having to wait for the network. If I had to wait for my PC to tell me when I could restart, it would make me wait ONCE.

Dave

Dave Hinerman
WD8CIV@worldnet.att.net

Date: Mon, 03 Dec 2001 14:28:35 -0900
From: Jim Larsen AL7FS <AL7FS@ARRL.NET>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [113748] Alaskans - QRP - Good news.
Message-ID: <3C0C0AA2.683115F6@ARRL.NET>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

This is good news. I have been trying for some time to encourage others

in Alaska to get on during the contests. If we can have four or more on at one time (not even counting myself) that is a success for QRP in my book. Who says it is hard to work Alaska? Not any more. Maybe my trip to KL7Y is no longer needed. :-)

73, Jim

--

Jim Larsen, AL7FS, Anchorage, Alaska
(BP51cc) - 61.101 North, 149.824 West
mailto:al7fs@arrl.net - <http://www.qsl.net/al7fs/>

Bob Patten wrote:

>... In the Homebrew Sprint yesterday, I worked KL7GN on 10 & 20 Meters, and WL7CDC on 10 & 15. Four AK QSO's in a QRP sprint - sure is a record for me. But no AL7FS. :-(

73, Bob Patten, N4BP Plantation, FL

Date: Mon, 3 Dec 2001 18:40:21 -0500
From: Haines Brown <brownh@hartford-hwp.com>
To: w6toy@erols.com
Cc: qrp-l@Lehigh.EDU
Subject: [113749] Re: [Elmer 101] component form factors
Message-ID: <200112032340.fB3NeLF08385@hartford-hwp.com>

Bruce,

I'm replying on list because there may be some confusion that is useful to clear up.

The subject line of my query started, "Elmer 101," which I assumed meant we were talking about the SW20+ in general unless specified otherwise.

Indeed, the supplier of the kit provided a parts list, but my question arose because a part did not fit its description on that list.

One reply to my question suggested that there was considerable flexibility in the specific choice of part, and that the two options specified in the parts list were no longer available.

Another reply addressed the broader form factor question. I was pointed to a description of the part's form factor, which is found in Chapter 24 of the 1998 ARRL Handbook.

So the immediate questions have been answered. But it would also be useful to know of information that is more comprehensive and/or

up-to-date than found in the Handbook, preferably on line.

Haines KB1GRM

Date: Mon, 3 Dec 2001 17:44:22 -0600
From: "Stuart Rohre" <rohre@arlut.utexas.edu>
To: <qrp-1@lehigh.EDU>
Subject: [113750] Re: Note on Littlefield based kits and Ham Radio piece
Message-ID: <016e01c17c54\$6f059b20\$4e100a0a@rohredt2000>

At the time of Larry, KA5T and others fixing the Radiokit competition, I looked up the original Littlefield paper in Ham Radio. There was some missing information and errors between the text and schematic. I think the printers left out some of the paper, and I did not have time to follow up in later editions and see if errata were presented. I don't believe you can follow the piece and come up with a working model of the original radio design. With some experience, one could fill in the missing pieces with standard circuits and technique, but since the radio used a lot of discrete circuitry crammed into a small box, it would not be an easy project. As I recall, Larry and others had to redesign certain stages to good engineering practice to get the kit to work at all.

72,
Stuart K5KVH

Date: Mon, 03 Dec 2001 18:45:01 -0500
From: Al Scanandoah <k2zn@rochester.rr.com>
To: unlisted-recipients;; (no To-header on input)
Cc: Low Power Amateur Radio Discussion <qrp-1@lehigh.edu>
Subject: [113751] Re: 160M Sprint
Message-ID: <3C0C0E7D.B365955A@rochester.rr.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

W2AGN wrote:

>
> During the last hour of the Holiday Spirits Sprint, tried 1810, CQed for a
> while, but nothing.
>
> Hopefully, there will be a turnout for the 160M Sprint this Wednesday
> evening. Load up the gutters, 40M dipoles, grandma's corset stays, whatever!

I'll have all of the above fed in parallel - perhaps I'll be heard
somewhere outside of the county!

Al, K2ZN

End of QRP-L Digest 2393

